Pilgrim Federation EYFS & KS1 Learning Theme:



Superheroes

Links to Other Learning Themes:
This learning theme links to: Animals including Pets The Great Fire of London Our Bodies Space People Who Help Us Once Upon a Time



Superheroes



Communication and Language

- Use superhero puppets to take part in rescue missions.
- Practise saying superhero phrases such as pow!
- Share superhero themed books and talk about the heroes/villains.
- Use super senses to take part in a listening game.

Mathematics

- Use five frames to count out superhero toys.
- Throw a dice – complete the number of super star jumps.
- Use 3D shapes to print with to make superhero badges.
- Ask the children to use their super strength to find heavy objects.
- Build skyscraper with interlocking bricks.

Understanding of the World

- Explore stretchy superheroes. Look at materials that do and do not stretch.
- Talk about different super powers.
- Use superhero figures and different landscapes to take part in imaginative play.
- Make magnetic superheroes and test them flying.
- Explore the superpower of invisibility by encouraging the children to make marks on white paper with a white candle. Paint over the marks to make them visible.
- Investigate parts of gadgets by setting up an exploration table.

Literacy

- Read the book 'Supertato'. Decorate potato heads.
- 'Write' their names to create superhero badges.
- Create an ice power setting using shaving foam. Challenge the children to write their names into the 'ice' using a finger, a spatula or a lolly stick.
- Read a superhero story. Make superhero stick puppets.
- Set up a sensory tray using flour and glitter. Can the children make marks in the superhero power dust?

Expressive Arts & Design

- Make superhero capes and masks for the children to wear.
- Make superhero vehicles using recyclable materials.
- Use streamers to create superhero dances.
- Make superheroes from plasticine.
- Create star-shaped explosions of superhero power by squirting watery paint from spray bottles onto a roll of paper.

Physical Development

- Use construction materials to create superhero cities.
- Provide laminated superhero figures with punched holes and allow the children to thread laces.
- Freeze superheroes in ice. Encourage the children to use tools to free the superheroes.
- Provide paints for the children to explore to make superhero shields.
- Use tweezers to rescue teddy bears from bowls.

Personal, Social and Emotional Development

- Provide a range of costumes for the children to dress up in. Encourage turn taking.
- Create a sharing basket that contains superhero-themed toys to aid discussion.
- Carry out a superhero day where the children dress as their favourite superheroes.

EYFS (Nursery & Reception) Medium Term Planning
Learning Theme: Superheroes

Big Question: What makes someone a superhero?

<table>
<tr><td colspan="2">Focus of Learning (INTENT):
Within this topic the children will explore different types of superheroes both fictional and those in real-life. They will use their interests and knowledge of superheroes that they like and regularly talk about. The children will learn key superhero phrases and use these within their own imaginative play. They will consider heroes in the wider sense and think about heroes that we do not see, yet naturally discover. This unit will provide the children with the opportunity to be imaginative and creative thinkers as they consider the role of a superhero and use this to reflect on how they would behave if they were one.</td><td colspan="2">Prior Learning/Links to Learning Themes:
• Links to the learning theme ‘People Who Help Us’ as the children explore real-life superheroes.
• Links to the children’s personal experiences of their own families and who they believe to be their heroes (people who are important to them).
• Children will have knowledge of superheroes that they see on television, through books and animations.
• Children may choose to take part in imaginative or exploratory play with superhero figures.</td></tr>
<tr><td colspan="4">Key Questions for Teaching:
• What do we know about superheroes?
• How could a superhero protect us?
• Which superhero power would you like to have?
• How do real-life superheroes help us?
• Where do superheroes live?
• How do superheroes get around?
• Who is your hero and why?</td></tr>
<tr><td>Focused Literacy Texts:</td><td>• Super Daisy and the Peril of Planet Pea
• If I Was a Superhero Poem
• Superkid
• Supertato
• Superworm
• Daddies and Baddies</td><td>Texts that Link (these can be read at story time and used in provision):</td><td>• How to Save a Superhero
• Superhero Baby!
• Captain Cuddles
• Superhero Hotel
• Superheroes Don’t Get Scared… Or Do They?
• Knock Knock Superhero
• Supermouse and the</td></tr>
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			Volcano of Doo • There's a Superhero in Your Book
Role-Play Opportunities	• Cave/Den/Lair • School (Links to Superkid) • Skyscraper • Supermarket (Links to Supertato)		
Nursery Rhymes & Songs	You're Super and You Know It; 1-10 Super Song; Superheroes Save the Day.		

	Communication and Language	Personal, Social, Emotional Development	Physical Development Enhancements*	Literacy Autumn Term Spring Term	Mathematics	Expressive Arts & Design	Understanding of the World
Week 1 Settling In **Autumn Term Only**	N – Spend time getting to know the children throughout the day. Learn their interests. R – Circle Time – Talk about themselves using new vocabulary to describe them as a person. Talk about their families - Who is in their family? What special things do they like to do with their family? N/R – Sing nursery rhymes.	N/R – Sing Head, Shoulders, Knees and Toes - Can they identify parts of their body? N/R – Provide the children with chalks to draw around each other. N/R – Make nature faces using seasonal materials.	N – Support the children to regular their emotions within the setting by developing a positive relationship. R – Think about what makes us all unique through looking at photographs of each other. Look at similarities/differences between us all. N/R – Discuss the classroom rules and why we have them. How do they keep us safe?	N/R – Share books with children about starting school e.g. Starting School by Janet & Alan Ahlberg. N/R – Take part in regular reading sessions and allow the children to choose books of interest to share. N – Children to draw a picture of their family. R – Children to draw a picture of their family. Can they add labels to their pictures?	N/R – Sing nursery rhymes and read books involving number. R - Encourage children to sort objects by colour and size. R – Make comparisons through play using Mathematical vocabulary e.g. more than/less than.	N/R – Create self-portraits using different media. R – Draw something that they like to do. Can they describe it? Mix together different coloured paints. Can they paint their hands and feet?	N/R – Use a treasury basket to explore the five senses. Go on a sensory walk around the setting/village. Use magnifying glasses and explore natural objects.
	Communication and Language	**Personal, Social, Emotional Development**	**Physical Development Enhancements***	**Literacy Autumn Term Spring Term**	**Mathematics**	**Expressive Arts & Design**	**Understanding of the World**
Week 2	N/R – Encourage	N/R - Create a	N/R – Provide bright	**Autumn Term**	Following	N – Create	N – Provide the

What do we know about superheroes? Text – Super Daisy and the Peril of Planet Pea	the children to talk about their favourite superhero. What makes them their favourite? R – Talk about the different characteristics of a superhero. What makes them special/unique?	grid of what the children would like to find out, and what they already know.	coloured playdough. Can the children make a superhero face by adding other materials to it? N/R – Freeze a variety of superhero figures and encourage the children to dig them free.	N/R – Read Super Daisy and the Peril of Planet Pea. Talk about the text and the key events. N – Make giant peas! Describe the different places that they go. Use props to re-enact these events. N – Decorate superhero pants. Add their names. N – Retell the story using props and stick puppets.	White Rose Maths	life-sized superheroes by drawing around one another before painting them. R – Create superhero stick puppet crafts. Encourage the children to discuss their chosen design and evaluate it. Can they add labels?	children with different types of materials, both long and short. Can they create a cape to use in imaginative play like a superhero? R – Explore the suitability of different materials for a cape. Which material would be best and why? Consider materials that are heavy or light, absorbent or waterproof.

	Communication and Language	Personal, Social, Emotional Development	Physical Development Enhancements*	Literacy Autumn Term Spring Term	Mathematics	Expressive Arts & Design	Understanding of the World
Week 2 (cont.)				R – Create a comic strip with the key events from the story. R – Draw Daisy or use a picture of Daisy and describe her. R - Talk about how Daisy stops the peas. Draw Daisy and add a speech bubble with an action word "BANG". R – Talk about the places that the peas would end up. Write a list of the places.			Discuss which material would be best and why. Record a sentence.

	Communication and Language	Personal, Social, Emotional Development	Physical Development Enhancements*	Literacy Autumn Term Spring Term	Mathematics	Expressive Arts & Design	Understanding of the World
Week 2 (cont.)				R – Retell the story using pictures. Add the children's words (oral retelling). **Spring Term** N/R – Share the story based on Super Daisy! Discuss the key questions: Who are the characters in the story? Where is the story set? What surprising thing happens in the story?			

	Communication and Language	Personal, Social, Emotional Development	Physical Development Enhancements*	Literacy Autumn Term Spring Term	Mathematics	Expressive Arts & Design	Understanding of the World
Week 2 (cont.)				What does Super Daisy do? What happened at the end of the story? N – Create giant peas that would take over Planet Earth. Add descriptive labels. N – Create pictures of where the peas appear in the story. Add key phrases to match these.			

	Communication and Language	Personal, Social, Emotional Development	Physical Development Enhancements*	Literacy Autumn Term Spring Term	Mathematics	Expressive Arts & Design	Understanding of the World
Week 2 (cont.)				N – Talk about how Daisy stops the peas. Draw Daisy and add a speech bubble with an action word "BANG". R – Read the story and discuss the meaning of onomatopoeia. Mind-map the onomatopoeic words from the text e.g. BOOM! BANG! POW! BIFF! BOFF! Provide children with superhero 'pants' and ask them to add action words to these.			
	Communication and Language	**Personal, Social, Emotional Development**	**Physical Development Enhancements***	**Literacy Autumn Term Spring Term**	**Mathematics**	**Expressive Arts & Design**	**Understanding of the World**
Week 2				R – Write			

(cont.)				sentences about the peas and where they are found. R – Introduce the children to the similes used within the story. What is Daisy super like? Recall the similes. Can they think of their own? Record this through drawing and writing. R – Retell the story simply using a beginning, middle and end.			

	Communication and Language	Personal, Social, Emotional Development	Physical Development Enhancements*	Literacy Autumn Term Spring Term	Mathematics	Expressive Arts & Design	Understanding of the World
Week 3 **How might a superhero protect us?** Text – If I Was a Superhero Poem by Sally Gray	N/R – Place different superhero stick puppets in the provision area to encourage the children to retell or make-up their own superhero stories. R – Talk about the meaning of the word villain. How would it feel to be a villain and why?	N/R - Use an enlarged version of a superheroes' poster as part of class discussions. Look at the poster together and discuss how the superheroes are helping other people.	N/R – Create an obstacle course with large apparatus for the children to complete physical challenges. Place a masking tape spiders web over a tuff tray. Encourage the children to rescue the superheroes from the villains by using tweezers.	**Autumn Term** N/R – Share the poem and talk about the key words within it. Add actions and perform the poem as a group. N – Decorate a superhero cape or use different types of fabrics to form capes. Take part in imaginative play where the children are superheroes – encourage the children to use similar verbs to those in the poem.		N – Make a superhero mask. Decorate it with different creative materials. R – Make a paper glider. Evaluate the design verbally or through writing.	N/R - Discuss the use of our ears and how these can be classed as 'powerful'. Explain that some people have difficulty with their hearing and could be deaf. Explain how people with a hearing impairment use dogs to help them (dogs are their heroes and protect them from harm). **Could arrange a visit from a hearing dog here.**
	Communication and Language	**Personal, Social, Emotional Development**	**Physical Development Enhancements***	**Literacy Autumn Term Spring Term**	**Mathematics**	**Expressive Arts & Design**	**Understanding of the World**
Week 3				N – Print photographs of			N/R – Go on a senses walk and

(cont.)				the children playing in superhero costumes. Provide paper for them to write captions, speech bubbles or narratives. Create a class display. N – Draw a superhero using lines and shapes. Follow the key instructions. R – Focus on the words that rhyme. Find the rhyming pairs.			focus on our ears. What can we hear? R – Record all of the things heard on the senses walk through drawing/mark making/writing.

	Communication and Language	Personal, Social, Emotional Development	Physical Development Enhancements*	Literacy Autumn Term Spring Term	Mathematics	Expressive Arts & Design	Understanding of the World
Week 3 (cont.)				R – Explore the meaning of new, unusual vocabulary. Create a word web as a group. R – Look at the different verses of the poem. Write an alternative version as a group. R – Perform the new version of the poem using actions. **Spring Term** N/R – Share the poem and talk about the key words within it. Add actions and perform the poem as a group.			
	Communication and Language	**Personal, Social, Emotional**	**Physical Development Enhancements***	**Literacy Autumn Term Spring Term**	**Mathematics**	**Expressive Arts & Design**	**Understanding of the World**

		Development					
Week 3 (cont.)				N - Think about what the children would do if they were superheroes. Act out verbs related to this e.g. fly. N – Decorate a superhero cape or use different types of fabrics to form capes. Take part in imaginative play where the children are superheroes – encourage the children to use similar verbs to those in the poem. Provide different paper and speech bubbles for the children to create captions.			
	Communication and Language	**Personal, Social, Emotional Development**	**Physical Development Enhancements***	**Literacy** **Autumn Term** **Spring Term**	**Mathematics**	**Expressive Arts & Design**	**Understanding of the World**
Week 3				N – Print photographs of			

(cont.)				the children playing in superhero costumes. Encourage them to create name labels for their superhero pictures. R – Look at the rhyming words within the poem. Write the rhyming pairs down. R – Re-write the poem as a group, changing each verse. R – Re-write a verse independently.			
	Communication and Language	**Personal, Social, Emotional Development**	**Physical Development Enhancements***	**Literacy** **Autumn Term** **Spring Term**	**Mathematics**	**Expressive Arts & Design**	**Understanding of the World**
Week 3 (cont.)				R – Collate each child's verse together to form a new poem. Perform this to an			

				audience.			

	Communication and Language	Personal, Social, Emotional Development	Physical Development Enhancements*	Literacy Autumn Term Spring Term	Mathematics	Expressive Arts & Design	Understanding of the World
Week 4 **Which superhero power would you like to have?** Text – Superkid by Claire Freedman and Sarah McIntyre	N/R – Ask the children to discuss what their superpower would be and why. Share with the group how they would use their superpower. N/R – Provide bat masks (Batman) and capes for children to take part in imaginative play as superheroes.	N/R - Discuss how everyone is special and has their own super skills, as well as likes and dislikes. Encourage children to share their skills and thank others for using their skills in helpful ways.	N/R – Create a 'secret message' station for the children to write secret messages to one another. Add different sized fabrics to the home corner. Can the children create their own superhero costumes?	**Autumn Term** N/R – Invite children to dress up as superheroes! N – Take part in imaginative play as superheroes using key superhero phrases. N – Read and perform Superkid using props/stick puppets. N – Children to recall why they are super using the sentence stem 'I am a superkid because'.		N – Use percussion instruments to make the sounds of different superheroes. R – Make secret messages using candle wax and UV light pens.	N – Children to draw/create an image of Jesus and talk about why he is special/a hero. R – Relate this to Jesus and how people believe he has 'superpowers' – link this to a Bible story such as Jesus Heals a Paralyzed Man; Jesus Calms the Storm; Jesus Walks on Water. Retell the story through imaginative play, story sequencing or writing.
	Communication and Language	**Personal, Social, Emotional Development**	**Physical Development Enhancements***	**Literacy** **Autumn Term** **Spring Term**	**Mathematics**	**Expressive Arts & Design**	**Understanding of the World**
Week 4				*Adults to record*			

(cont.)				*this in the children's books next to photographs of them as superheroes.* R – Read the story and create a story map using drawing. Perform the story. R – Discuss what Superkid does. Draw different pictures of what he does and add phrases e.g. Superkid flies. Superkid blows a giant bubble.			
	Communication and Language	**Personal, Social, Emotional Development**	**Physical Development Enhancements***	**Literacy** **Autumn Term** **Spring Term**	**Mathematics**	**Expressive Arts & Design**	**Understanding of the World**
Week 4 (cont.)				R – Think about their own personal qualities and what makes them 'super'. Draw themselves as a superhero and record a			

				phrase to explain why they are super. R – Create their own stories and map these using drawing/marks. R – Perform their own stories through imaginative play.			

	Communication and Language	Personal, Social, Emotional Development	Physical Development Enhancements*	Literacy Autumn Term Spring Term	Mathematics	Expressive Arts & Design	Understanding of the World
Week 4 (cont.)				N – Children to recall why they are super using the sentence stem 'I am a superkid because…'. Encourage the children to add their own marks. N – Take part in imaginative play as superheroes. Encourage children to invent their own story lines and record the narration of these as they go along.			

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Week 4 (cont.)				R – Use a photograph from the previous day. Children to record the phrases 'I am a superhero' and 'I can…'. R – Write a list of Superkid's superpowers from the story. R – Use adjectives to describe Superkid and use the sentence stem 'Superkid has'.			

	Communication and Language	Personal, Social, Emotional Development	Physical Development Enhancements*	Literacy Autumn Term Spring Term	Mathematics	Expressive Arts & Design	Understanding of the World
Week 4 (cont.)				R – Children to imagine they are a superhero. What adventure would they go on? Map this using a story map. R – Children to write simple stories based on their own superhero adventure.			

	Communication and Language	Personal, Social, Emotional Development	Physical Development Enhancements*	Literacy Autumn Term Spring Term	Mathematics	Expressive Arts & Design	Understanding of the World
Week 5 **How do real-life superheroes help us?** Text - Supertato	N/R – Learn some superhero songs. Can the children perform them? R – Play a game of 'Superhero Says'. N/R - Use key words and vocabulary linked to superheroes such as 'pow' 'wow' 'boom' 'crash'.	N/R - Ask the children if they can think of any real heroes. Are there people who help others? How do they do this? N/R – Talk about how superheroes have to work as a team. How can we work as a team in class? R – Create a set of superhero class rules.	N/R – Allow the children the opportunity to cut up different fruits and vegetables (linked to the story). N/R – Create a tuff tray with superheroes and skyscrapers. Can they use cars to move around the area?	**Autumn Term** N/R – Talk about the story and recall the key events. N – Use stick puppets/props to retell the story in the supermarket (home corner). N – Make the Evil Pea using a paper plate and paint. Orally describe what the pea is like. N – Make Supertato using craft paper. Describe what Supertato is like. How is he different to the Evil Pea?		N/R – Design (R) and make a superhero from a potato.	N – Matching activity of the person and their role/vehicle. R – Explore real-life superheroes from the past and their achievements. This could be an explorer or inventor of your choice. Discuss their achievements and encourage the children to recall information about them. Record a sentence about the person and their achievements.
	Communication and Language	**Personal, Social,**	**Physical Development**	**Literacy Autumn Term**	**Mathematics**	**Expressive Arts &**	**Understanding of the World**

		Emotional Development	Enhancements*	Spring Term		Design	
Week 5 (cont.)				N – Draw their own superhero or create a superhero mask. Talk about what they superhero would be like and what their power would be. R – Use pictures to retell the story. Orally discuss what is happening in each picture. R – Make the Evil Pea and add describing labels.			

	Communication and Language	Personal, Social, Emotional Development	Physical Development Enhancements*	Literacy **Autumn Term** **Spring Term**	Mathematics	Expressive Arts & Design	Understanding of the World
Week 5 (cont.)				R – Make Supertato using real potatoes. Add describing labels. Recall how it was made (e.g. spoken language of instructions). R – Draw/make or create their own superhero. Add labels to describe their superhero and their powers. **Spring Term** N/R – Talk about the story and recall the key events. N – Use story language when recalling the story.			
	Communication and Language	**Personal, Social, Emotional**	**Physical Development Enhancements***	**Literacy** **Autumn Term** **Spring Term**	**Mathematics**	**Expressive Arts & Design**	**Understanding of the World**

		Development					
Week 5 (cont.)				R – Talk about why things happened using because. N – Draw Supertato and orally describe or add marks. N – Create the Evil Pea using craft materials and add descriptive labels. N – Make their own superhero masks. Take part in pretend play where they are a superhero. N – Draw their superhero. Add marks/single sounds for labels.			
	Communication and Language	**Personal, Social, Emotional Development**	**Physical Development Enhancements***	**Literacy** **Autumn Term** **Spring Term**	**Mathematics**	**Expressive Arts & Design**	**Understanding of the World**
Week 5 (cont.)				R – Sequence the story using pictures and add key phrases.			

				R – Draw/make Evil Pea and add a describing sentence. R – Draw their own superhero 'Supertato' and describe their super power using a sentence. R – Create a WANTED poster for Evil Pea.			

	Communication and Language	Personal, Social, Emotional Development	Physical Development Enhancements*	Literacy Autumn Term Spring Term	Mathematics	Expressive Arts & Design	Understanding of the World
Week 6 **Where do superheroes live?** Text - Superworm	N/R - Create a superhero den/lair to encourage children to role play and add narrative to their play. N/R - A villain is stealing objects! Can the children use their superhero skills to work out which objects they are stealing? Remove an object each time and see if the children can recognise which object was 'stolen'.	N/R – Talk about how superheroes have to stay healthy. Make healthy superhero smoothies with the children. N/R – Provide the children with puppets and act out scenarios where one of the puppets is a villain. How would we respond?	N/R – Provide different materials outside for the children to create their own dens. Turn the bikes into superhero vehicles. Can they manoeuvre them around the outdoor area at different speeds to catch the villains?	**Autumn Term** N/R – As a whole class, look carefully at the front cover of the book. Think about what the book is about using clues from the front cover. Create a group mind-map to gather ideas. N – Decorate a large scale Superworm using tissue paper and paint. Describe Superworm orally. N – Draw Wizard Lizard and describe him orally.		N/R – Create superhero vehicles using different junk-modelling materials. R – Test the vehicles out on different surfaces and at different heights. Do they work effectively?	N – A superhero has lost its toy within our school area. Follow a map to find the toy (treasure hunt). R – Create a map of the local area on a large scale – use chalk, paint, water. Add skyscrapers and superheroes to the map using different materials. Discuss where the superhero would travel to and why.
	Communication and Language	**Personal, Social, Emotional Development**	**Physical Development Enhancements***	**Literacy Autumn Term Spring Term**	**Mathematics**	**Expressive Arts & Design**	**Understanding of the World**
Week 6				N – Look at the			

(cont.)				other animals within the story. Rehearse the names of the animals. Use non-fiction books to gather facts. N – Retell the story using props. R – Describe Superworm using adjectives. Write labels. R – Describe Wizard Lizard using adjectives. Write labels. Discuss how the characters differ.			
	Communication and Language	**Personal, Social, Emotional Development**	**Physical Development Enhancements***	**Literacy** **Autumn Term** **Spring Term**	**Mathematics**	**Expressive Arts & Design**	**Understanding of the World**
Week 6 (cont.)				R – Write a 'secret message' to explain where Superworm has been kidnapped to 'I am in the lair'. R – Write a list of			

				the things that Superworm finds underground. R – Write a set of instructions based on how to rescue Superworm (as a group) or use pictures and key words to sequence.			

	Communication and Language	Personal, Social, Emotional Development	Physical Development Enhancements*	Literacy Autumn Term Spring Term	Mathematics	Expressive Arts & Design	Understanding of the World
Week 6 (cont.)				**Spring Term** N/R - As a whole class, look carefully at the front cover of the book. Think about what the book is about using clues from the front cover. Create a group mind-map to gather ideas. N – Draw Superworm and Wizard Lizard. Discuss their characters and describe. Orally compose a comparative sentence e.g. Superworm is nice, but Wizard Lizard is mean			
	Communication and Language	**Personal, Social, Emotional Development**	**Physical Development Enhancements***	**Literacy** **Autumn Term** **Spring Term**	**Mathematics**	**Expressive Arts & Design**	**Understanding of the World**
Week 6				N – Sequence the			

(cont.)				story using pictures and retell through performance – use key refrains. N – Look at the animals from the story. Draw an animal each and record a fact (make a fact book). R – Provide the children with a picture of Superworm. Add describing labels to this. R – Write a sentence to describe Superworm.			
	Communication and Language	**Personal, Social, Emotional Development**	**Physical Development Enhancements***	**Literacy Autumn Term Spring Term**	**Mathematics**	**Expressive Arts & Design**	**Understanding of the World**
Week 6 (cont.)				R – Focus on Wizard Lizard. Provide the children with a picture and write			

				a short description of him and his character e.g. He is mean. Extend children's vocabulary by thinking of key words e.g. scheming, cruel, bossy. R – Write a letter to Superworm's friends asking for help/for him to be rescued.			

	Communication and Language	Personal, Social, Emotional Development	Physical Development Enhancements*	Literacy Autumn Term Spring Term	Mathematics	Expressive Arts & Design	Understanding of the World
Week 6 (cont.)				R – Write a prediction based on how they think Superworm will escape.			

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Week 7 **Who is my hero and why?** Text – Daddies and Baddies	N/R - Discuss what it means to be a superhero – spend some time talking about what the children feel makes someone a superhero again, refer to real life people who help us.	N/R – Share photographs of people that are special to us, who we see as our heroes. Talk about why they are important.	N/R – Set up a series of ball challenges for the children to take part in. How many challenges can they do? Make superhero bridges outside in the outdoor area. How can they carefully cross the bridges without falling?	**Autumn Term** N/R – Read the story Daddies and Baddies. Talk about the personalities of the different Dads and how they are all different. How do they become superheroes? N – Look at pictures of their Dad or a 'Dad-Like Figure'. What is he like? Orally describe their Dad. N – Make a portrait of their Dad. N – Draw their Dad with a cape! He is now a superhero.		N – Create a painted portrait of a person that is their hero and make a 'superheroes' display. Add the photograph of their important person to the display. R – Draw a portrait of the hero within their life using more complex shapes and lines.	N – Create a family tree. Discuss how our families keep us safe. R – Talk about the important people in the children's lives. What makes them heroes? Draw a picture of them and record why they are a hero.
	Communication and Language	**Personal, Social,**	**Physical Development**	**Literacy Autumn Term**	**Mathematics**	**Expressive Arts &**	**Understanding of the World**

		Emotional Development	Enhancements*	Spring Term		Design	
Week 7 (cont.)				Discuss his superpowers and add scribed labels. N – Use an action figure as their Dad. Take part in imaginative play where he has to take part in a superhero rescue mission. R – Draw a picture of their Dad and add labels. R – Create a comic strip with their Dad as the baddie.			

	Communication and Language	Personal, Social, Emotional Development	Physical Development Enhancements*	Literacy Autumn Term Spring Term	Mathematics	Expressive Arts & Design	Understanding of the World
Week 7 (cont.)				R – Retell their own story through drawing and phrases using their Dad as the main character. **Spring Term** N/R – Read the story and talk about the key events. Discuss the meaning of the word **heist.** N – Draw a picture of their Dad and add labels. Write the word 'Dad'. N – Draw their Dad as a superhero. Add labels to explain what their Dad is like/can do.			
	Communication and Language	**Personal, Social, Emotional**	**Physical Development Enhancements***	**Literacy** **Autumn Term** **Spring Term**	**Mathematics**	**Expressive Arts & Design**	**Understanding of the World**

		Development					
Week 7 (cont.)				N – Use an action figure as their Dad. Take part in imaginative play where he has to take part in a superhero rescue mission. Adult to record their narration as they tell their own story. R – Draw their Dad and write sentences to describe him (including personality).			

	Communication and Language	Personal, Social, Emotional Development	Physical Development Enhancements*	Literacy Autumn Term Spring Term	Mathematics	Expressive Arts & Design	Understanding of the World
Week 7 (cont.)				R – If your Dad was a superhero, what superpowers would he have? Draw their Dad as a superhero. Write what superpowers he would have. R – Think of the story involving their own Dad. Re-write a short story using their own Dad as the character. How does he stop the Baddie?			

***Please continue to follow your PE plan for your class, but consider the above suggestions to enhance your provision to support children's fine and gross motor development.**

Class:		Date:		Topic:	

Area of Learning	Indoor Enhancements	Outdoor Enhancements	Key Vocabulary and Questions	Children's Learning and Interests

Communication and Language				
Personal, Social and Emotional Development				
Physical Development				
Literacy				
Mathematics				
Understanding the World				
Expressive Arts and Design				

KEY STAGE 1

By the end of the piece of learning about 'Superheroes' children will be able to answer the following questions:

1. **If you could have any superpower, what would it be, and why?** This encourages imagination and allows them to express their desires.

2. **Who is your favourite superhero, and what makes them special?** This helps them articulate their preferences and understand what qualities they admire.

3. **What kinds of problems do superheroes help solve?** This prompts them to think about the role of superheroes in helping others.

4. **If you were a superhero, what kind of costume would you wear?** This allows for creative expression and visual thinking.

5. **Do you think you can be a hero in real life? How?** This helps them relate the concept of heroism to their own lives, and that you do not need super powers to be a hero.

6. **What would you do if you saw someone needing help?** This question helps them to think about empathy, and how to help people in their everyday lives.

Other questions to consider:
If your favourite toy became a superhero, what would their superpower be? This combines familiar play with imaginative superhero concepts.
What's the funniest superhero name you can think of? This encourages playful creativity and wordplay.
If you could give a superhero a pet, what pet would it be, and what special thing could it do? This adds a fun animal element and encourages them to think about partnerships.
If superheroes went to school, what subject do you think they would be best at? This connects superheroes to their own school experience and encourages them to think about different skills.
What kind of villain would a superhero have to fight in your playground? This makes the idea of superheroes more relatable to their own environment.
If you could write a story about a brand-new superhero, what would their story be? This encourages storytelling, and narrative creation.

Key Vocabulary

This is a list of key vocabulary for Key Stage 1 pupils related to the learning theme **'Superheroes',** along with simple explanations suitable for that age group. This learning theme is fantastic for encouraging imagination, character development, and exploring themes of good vs. evil, bravery, and helping others.

Core Concepts:
Superhero: A special person who has amazing powers and uses them to help others and fight bad guys.
Hero/Heroine: A brave person who does good things for others. (Hero for a boy/man, Heroine for a girl/woman).
Villain: A bad person who tries to cause trouble or hurt others.
Power: A special ability that a superhero has, like super speed, flying, or invisibility.
Skill: Something a superhero is very good at doing, like fighting, thinking, or building.
Team: A group of superheroes who work together to help people.
Good: Doing things that are kind and helpful.
Evil/Bad: Doing things that are unkind or hurtful.
Justice: Making sure things are fair and right.
Bravery/Brave: Being courageous and not being afraid, even when things are scary.
Responsibility: Taking care of something or someone, knowing it's your job to do what's right.

Superhero Characteristics & Gear:
Cape: The flowing piece of cloth superheroes often wear on their back.
Mask: Something a superhero wears to hide their face or identity.
Costume: The special clothes a superhero wears.
Symbol: A special picture or sign that represents a superhero.
Gadget: A clever tool or invention that a superhero uses (e.g., a grappling hook, a special watch).
Secret Identity: The normal person a superhero pretends to be when they are not fighting crime.
Headquarters/Lair: The secret place where a superhero lives or works.

Actions & Scenarios:
Rescue: To save someone from danger.
Fight: To battle against bad guys.
Protect: To keep someone or something safe.
Save: To help someone who is in trouble.
Defeat: To beat or win against a villain.
Mission: A special job or task that a superhero needs to complete.
Challenge: A difficult task or problem that a superhero has to solve.
Solution: The answer to a problem.
Weakness: Something that makes a superhero not as strong or powerful (e.g., kryptonite for Superman).

Feelings & Traits:
Courageous: Another word for brave.
Strong: Having great physical power.
Fast: Able to move very quickly.
Clever/Smart: Being good at thinking and solving problems.
Kind: Being nice and thoughtful to others.

Helpful: Always willing to assist someone in need.

Activities to support vocabulary development:
Design Your Own Superhero: Children create their own superhero, including a name, power, costume, and symbol, using the vocabulary.
Role-play: Set up a "superhero training academy" or a "mission control" for children to act out scenarios.
Story Time: Read books about superheroes and discuss the characters, their powers, and their actions.
Word Walls: Create a display of superhero vocabulary with pictures.
Matching Games: Match superhero names to their powers or tools.
'What's My Power?': Children describe a power and others guess what it is.
Debate: Simple discussions about what makes a good superhero or villain.

Art & Design

Substantive Knowledge

In Key Stage 1 Art & Design, **substantive knowledge** covers the foundational technical elements (colour, line, shape, texture) and the physical vocabulary of materials and artistic movements.
The engaging learning theme of '**Superheroes**' serves as a perfect vehicle to teach bold formal elements. It builds an understanding of visual storytelling by showing how colour choice, thick lines, and specific patterns can evoke power, motion, and emotion.

1. Colour Theory: Bold and Powerful Palettes
Children learn that colour is an artistic choice used to create meaning, mood, and identity.

The Substantive Base: Knowing the **primary colours** (red, yellow, blue) and that they cannot be mixed from other colours; knowing that mixing two primaries creates **secondary colours** (purple, orange, green). Understanding the difference between **warm colours** (reds, yellows, oranges) and **cool colours** (blues, greens, purples).

Learning Theme Application:
The Facts: Recognising that superhero comic art relies heavily on high-contrast primary colours to make heroes look strong and vibrant (like Superman's iconic red and blue palette).
The Application: Pupils choose colour combinations to intentionally give a character a mood. They mix blue and yellow to create a stealthy green camouflage paint for a forest hero, or use fiery warm primaries to give a fire-themed hero an explosive appearance.

2. Line and Shape: Dynamic Action Figures
Children master physical control over materials to create structural form and expression.

The Substantive Base: Identifying and drawing different types of lines (**thick, thin, zigzag, wavy, straight**); understanding how lines meet to form geometric or organic shapes; using lines to indicate movement or action.

Learning Theme Application:
The Facts: Recognising that sharp zigzag lines convey danger, lightning-fast speed, or impact, while thick outline boundaries make characters stand out.

The Application: Pupils practice drawing action lines (speed streaks behind a running hero) and sharp starburst shapes. They learn to alter their physical grip on a drawing tool, applying heavy pressure to create a bold, dramatic boundary line around their superhero emblem, and light pressure for inner details.

3. Knowledge of Artists: Pop Art and Comic Style
Children learn that art belongs to historical traditions and genres created by pioneering designers.

The Substantive Base: Knowing about the **Pop Art** movement and the work of significant artists like **Roy Lichtenstein** or **Andy Warhol**. Knowing what **Ben-Day dots** are (closely spaced dots used in vintage print media to create shading and colour blending).



Pop Art: Comic Book Visual Elements and Ben-Day Textures. Source: helen_tosh / Getty Images

Learning Theme Application:
The Facts: Understanding that comic books were traditionally mass-printed using cheap ink dots and bold black lines, a commercial aesthetic that Pop Art celebrated.
The Application: Children analyse Lichtenstein's large-scale comic paintings. They mimic his technique by using bubble wrap dipped in paint or the end of a cotton swab to stamp patterned dot matrices onto their superhero background capes, creating the authentic texture of a vintage comic.

Why Substantive Art Knowledge Matters
1. It Transitions Children from Accidental to Intentional Creation
Without a base of substantive knowledge, young children paint and draw purely by chance, using whatever colour or line occurs to them in the moment. Learning the properties of colour and line gives them a toolkit. Instead of grabbing a random marker, a child can pause and think: *"My hero is sneaky and lives in ice, so I am going to use a cool colour palette of blue and purple with thin, sharp lines."* It gives them deliberate control over their creations.

2. It Teaches the Language of Visual Communication
We live in an intensely visual culture filled with logos, animations, and icons. Substantive art knowledge teaches children how to decode the hidden messages in the images around them. Understanding that a sharp

red triangle communicates something entirely different from a soft blue circle helps them read and understand media designs, product packaging, and animations.

3. It Instils Precision and Respect for Raw Media Tools
By explicitly learning the physical vocabulary of materials—such as how to load a paintbrush correctly, how to press down to change line weight, or how to wash a brush to prevent "muddying" a primary colour—children develop fine motor skills and creative respect for their workspace. This substantive technical discipline transforms chaotic mess-making into rewarding, high-quality craft production.

Disciplinary Knowledge

While substantive art knowledge provides children with the raw ingredients—such as knowing what the primary colours are or identifying a zigzag line—**disciplinary knowledge** is the active process of *thinking, acting, and evaluating like an artist.* In Key Stage 1, this means exploring materials through open-ended experimentation, refining a physical technique over time, making deliberate choices, and reflecting on what went well. Using the learning theme like **'Superheroes'** transforms children into active studio designers. They use characters and icons to learn how to manipulate media, learn from creative mistakes, and critique visual works.

Core Disciplinary Art Practices Applied to 'Superheroes'

A. Media Exploration and Technique Refinement

The Disciplinary Practice: Experimenting with a range of different tools and media (pencils, oil pastels, poster paints, clay) to discover their unique physical properties, limitations, and tactile behaviours.

Learning Theme Application:
The Context: Designing a textured shield or emblem for a superhero.
The Disciplinary Action: Instead of just colouring a pre-drawn template, children test how different media react on paper. They discover that press-and-smudge oil pastels create a thick, glossy texture that blocks out water, while watercolours flow smoothly across bare paper. They deliberately use this water-resistance trait to paint a vibrant wash right over an oil-pastel emblem, discovering a professional resist technique through hands-on practice.

B. Iterative Design and Redrafting (The Sketchbook Process)

The Disciplinary Practice: Using a sketchbook as a safe, private space to test out rough ideas, practice technical line drills, map out compositions, and modify designs before jumping into a final piece.

Learning Theme Application:
The Context: Creating a brand-new superhero character.
The Disciplinary Action: Pupils treat their sketchbook like an active planning lab. They practice drawing multiple variations of a hero's mask or costume emblem. They might draw one version using sharp, angry charcoal marks, and a second version using smooth, fluid chalk sweeps. They look at both side-by-side and evaluate which mark-making style fits their character's personality best before touching their final canvas.

C. Critical Reflection and Creative Responses

The Disciplinary Practice: Looking closely at their own work and the art of peers or professionals, using descriptive language to explain how an artwork makes them feel, and articulating what they would change next time.

Learning Theme Application:
The Context: Hosting a classroom "Comic Con Gallery Walk" to review everyone's superhero paintings.

The Disciplinary Action: Children practice giving and receiving constructive peer feedback. Instead of just saying, *"I like it, it's cool,"* they use their disciplinary vocabulary: *"The bright yellow background makes your hero pop out because it contrasts against the dark blue suit. Next time, I would make the outline even thicker to match the Pop Art style."*

Substantive vs. Disciplinary: The 'Superheroes' Art Split

Substantive Art Knowledge (The Ingredients)	Disciplinary Art Knowledge (The Cooking)
Knowing that mixing blue and yellow creates **green**.	**Testing out different ratios** of blue and yellow on a palette to find the perfect shade of forest green for a tree-hero's suit.
Knowing that **Roy Lichtenstein** used Ben-Day dots to create tone and texture in his comic book art.	**Critiquing an artwork** by deciding if stamping dots with bubble wrap or cotton swabs creates a cleaner, more effective vintage print texture.
Identifying a **geometric shape** (like a diamond or triangle) inside a superhero logo design.	**Manipulating paper or clay**, cutting or sculpting it into sharp, clean shapes to build a structural 3D chest plate emblem.

Why Disciplinary Art Knowledge Matters

1. It Builds Resilience by Reframing Mistakes as Discoveries

When children believe art is just about making a perfect final product, they get deeply frustrated when their hand doesn't draw exactly what is in their head. Disciplinary knowledge focuses heavily on the *process*. When a child's watercolour bleeds outside the lines of their superhero cape, a disciplinary approach prompts them to look at it objectively: *"That bleed actually makes the cape look like it's moving fast through the air."* It teaches them to adapt, troubleshoot, and view mistakes as creative opportunities.

2. It Connects Physical Action to Emotional Intent

Art is a powerful form of self-expression. Disciplinary knowledge shows children that their physical choices—how hard they press a crayon, how fast they sweep a brush, or how they match colours—directly change the mood of the viewer. Giving a child the autonomy to select their own mark-making tools to convey an emotion (like using chaotic, jagged lines to show a hero's explosive energy) builds deep confidence in their unique voice.

3. It Develops Fine Motor Control and Media Fluency

You can't learn how to handle a paintbrush or sculpt clay by listening to a lecture; you have to feel the resistance of the material against your fingers. Disciplinary practices give children the sustained time needed to build physical dexterity. By kneading clay for an action figure or controlling paint loads for crisp comic outlines, children refine their hand-eye coordination and learn how to select the absolute best tool for a job.

Key Stage 1 Superhero Art Disciplinary Progression Indicators

The Pupil is Not Yet Disciplinary If...	The Pupil is Demonstrating Disciplinary Thinking If...
They immediately paint their final background	They use a test strip of paper first to mix colours,

The Pupil is Not Yet Disciplinary If...	The Pupil is Demonstrating Disciplinary Thinking If...
without testing how their colours mix, accidentally ruining their main drawing with "muddy" secondary tones.	saying, *"I need to clean my brush before dipping into the yellow, otherwise my fire-hero's power will look brown."*
They grab the very first tool they see and give up completely if it doesn't give them a perfect result on the first try.	They switch tools purposefully, noting: *"The thick marker is too fat to draw my hero's tiny facial mask, so I am going to try a sharp colouring pencil instead."*
When asked about their finished piece, they cannot explain why they made it, simply saying, *"I don't know, I just made it like that."*	They can explain their choices clearly: *"I chose to tear up rough pieces of black tissue paper for the villain's cave because the fuzzy, rough texture feels scary."*

Learning Objectives

Produce creative work, exploring their ideas and recording their experiences:
Objective: Children will use their observations and imagination to create original superhero characters, costumes, symbols, and gadgets, expressing their ideas about heroism and villainy.
Superhero link: Designing their own superhero/villain, drawing action scenes, creating comic strips, or depicting the superhero's secret identity.

Become proficient in drawing, painting, sculpture and other art, craft and design techniques:
Objective: Children will develop skills in various art techniques using different materials to bring their superhero ideas to life.
Superhero link:
Drawing: Sketching superhero poses, drawing costume details, creating comic book panels, or designing emblems.
Painting: Mixing colours for superhero costumes, creating dramatic backgrounds for action scenes, or painting pop-art style superhero images.
Sculpture: Making 3D models of superheroes, villains, or their gadgets using clay, playdough, recycled materials, or even creating wearable masks/props.
Other techniques: Using collage to create layered costumes, printing superhero symbols, or using textiles to design and make parts of a costume (e.g., a cape).

Evaluate and analyse creative works using the language of art, craft and design:
Objective: Children will describe and compare their own artwork and the artwork of others, using appropriate art vocabulary in relation to 'Superheroes'.
Superhero link: Discussing the colours used to show a heroic or villainous character, describing the lines used to convey speed or power, talking about the textures on a costume, or comparing different superhero symbols. They might discuss how an artist made a character look brave or sneaky.

Know about great artists, craft makers and designers, and understand the historical and cultural development of their art forms:
Objective: Children will explore the work of artists, illustrators, and designers who create characters, costumes, or use dramatic visual storytelling.

Superhero link: Looking at comic book artists and illustrators, pop artists (like Roy Lichtenstein with his comic book style), costume designers, or even exploring mythological heroes and their visual representations. They could look at how different cultures depict heroes or mythical creatures.
Specific Objectives linked to 'Superheroes' (drawing from the above aims):
Using a range of materials creatively to design and make products inspired by 'Superheroes'.
Example: Making superhero masks or cuffs using card, fabric, and decorative materials.
Example: Constructing 3D models of superhero gadgets or vehicles from junk materials.
Example: Creating a "Hall of Heroes" display with individual superhero creations.

Using drawing, painting, and sculpture to develop and share ideas, experiences, and imagination about 'Superheroes'.
Example: Drawing sequential images to tell a short superhero story or capture a dynamic action scene.
Example: Painting portraits of their imagined superheroes or villains, focusing on facial expressions that convey emotion.
Example: Sculpting small clay figures of their superhero characters.

Developing a wide range of art and design techniques in using colour, pattern, texture, line, shape, form, and space to represent aspects of 'Superheroes'.
Example: Colour: Exploring the use of bold, contrasting colours for superhero costumes and dark, muted colours for villains or shadowy scenes.
Example: Pattern: Designing repeating patterns for superhero symbols or background cityscapes.
Example: Texture: Experimenting with different materials to create visual or tactile textures for costumes (e.g., shiny foil, rough fabric).
Example: Line: Using strong, bold lines to outline characters, jagged lines for energy bursts, or flowing lines for capes.
Example: Shape/Form: Understanding how to use geometric and organic shapes to build superhero figures and their environments.
Example: Space: Thinking about how to arrange figures on a page to create a sense of movement or drama (e.g., a superhero flying through the sky).
Learning about the work of a range of artists, craft makers, and designers who focus on character design, visual storytelling, or pop culture, describing similarities and differences, and making links to their own work.
Example: Looking at comic book artists and discussing how they draw different emotions or actions.
Example: Exploring how different artists use symbols to represent characters.
Example: Discussing how colours are used in famous superhero illustrations or films.

Lesson Ideas

Here is a complete, 6-week Medium-Term Plan for Key Stage 1 Art & Design using the learning theme **'Superheroes'**. This plan balances **substantive knowledge** (the technical facts, vocabulary, and artistic movements) with **disciplinary knowledge** (the hands-on studio practices of sketching, experimenting, and refining) to transform pupils into confident young designers.

Theme: Comic Book Creators (The Superhero Studio)
Duration: 6 Weeks (1 Hour per week)
Core Media Focus: Drawing, Painting, Mixed-Media Collage, and Printmaking

The 6-Week Superhero Art Scheme
Week 1: Setting Up the Lab (Line, Pressure, and Sketchbooks)

Substantive Knowledge (What to learn):
Know that a **sketchbook** is a private place for an artist to test ideas, practice techniques, and make mistakes.
Identify different types of line: **thick, thin, straight, wavy, zigzag, broken**.
Know that pressing hard with a tool makes a bold, heavy mark, while pressing lightly makes a faint, soft mark.
Disciplinary Knowledge (How to act like an artist):
Media Control: Manipulate drawing tools (graphite pencils, charcoal, fine liners) by altering physical grip and pressure to generate deliberate line varieties.
The Studio Task: Children open their new sketchbooks to practice "power lines." They draw sharp, energetic zigzags to represent lightning powers and smooth, fluid waves for flight paths, explicitly practicing altering their physical grip from heavy pressure (bold outlines) to light pressure (inner details).

Week 2: Costume Chemistry (Primary & Secondary Colour Mixing)
Substantive Knowledge (What to learn):
Know the three **primary colours**: red, yellow, and blue. Know that these cannot be mixed from other colours.
Know that mixing pairs of primary colours creates **secondary colours**: orange (red + yellow), green (yellow + blue), and purple (blue + red).
Disciplinary Knowledge (How to act like an artist):
Colour Experimentation: Systematically test pigment ratios on a plastic palette to discover and record precise colour transformations.
The Studio Task: Acting as costume designers, children use poster paints to mix custom shades for a superhero suit. They mix blue and yellow to create a stealthy green camouflage paint for a forest hero, or red and yellow for a fiery speedster, tracking their colour recipes in their sketchbooks.

Week 3: Designing the Emblem (Warm vs. Cool Identity)
Substantive Knowledge (What to learn):
Know the difference between **warm colours** (reds, oranges, yellows) and **cool colours** (blues, greens, purples).
Understand that warm colours evoke energy, fire, and heat, while cool colours evoke ice, calm, and stealth.
Disciplinary Knowledge (How to act like an artist):
Intentional Colour Choice: Deliberately select a colour scheme based on its emotional impact to communicate a character's traits without using words.
The Studio Task: Children design a bold geometric chest plate emblem (e.g., stars, diamonds, triangles). They choose to colour it using *only* fiery warm oil pastels to show explosive power, or *only* cool watercolour washes to show freezing powers, observing the sharp mood contrast across the room.

Week 4: Action Starbursts! (Pop Art & Roy Lichtenstein)
Substantive Knowledge (What to learn):
Know about the **Pop Art** movement and its connection to commercial comic books.
Know the artist **Roy Lichtenstein** and identify his signature style: heavy black outlines, bright primary colours, and **Ben-Day dots**.
Disciplinary Knowledge (How to act like an artist):
Artistic Emulation: Analyse a professional artist's style and adapt their techniques to create a new, original artwork.
The Studio Task: Pupils study Lichtenstein's dynamic comic frames. They draw a large, jagged "POW!" or

"BOOM!" action starburst. They paint it with vibrant primary colours and use cotton buds or bubble wrap dipped in paint to stamp a patterned texture of Ben-Day dots into the background.

Week 5: The Textured Cape (Mixed-Media Collage & Resist)
Substantive Knowledge (What to learn):
Know that **texture** is how something feels when touched (rough, smooth, bumpy, furry) or how it looks like it would feel.
Know that oil and wax *resist* (push away) water-based paints.
Disciplinary Knowledge (How to act like an artist):
Material Exploitation: Combine contrasting media (wax crayons and watercolour washes) to discover how chemical properties can create unique visual layers.
The Studio Task: Children create a mixed-media collage of a flying superhero's cape. They use heavy wax crayons to draw brick or scale textures onto paper, then wash over it with watery liquid paint to watch the texture magically pop through the paint layer. They cut and tear these papers to assemble a textured, layered collage cape.

Week 6: The Comic Con Gallery (Critical Review & Exhibition)
Substantive Knowledge (What to learn):
Know that an **exhibition** is an organised display where artists share their completed work with an audience.
Use specific art vocabulary (**line, pressure, primary, secondary, warm, cool, texture**) to describe an artwork.
Disciplinary Knowledge (How to act like an artist):
Critical Evaluation: Critique visual pieces objectively, offering specific feedback on technical execution and explaining how an artwork makes them feel.
The Studio Task: The classroom transforms into a "Comic Con Gallery." Children display their final pieces. They conduct a silent gallery walk, placing sticky notes with constructive peer feedback using a simple frame: *"Your bold black outlines make the hero stand out"* or *"Your cool colour choices make the villain look truly icy."*

Weekly Curriculum Progression Matrix

WEEK	ART ELEMENT	SUBSTANTIVE KNOWLEDGE (The Facts)	DISCIPLINARY KNOWLEDGE (The Studio)
Week 1	Line & Pressure	Sketchbooks host mistakes; line types.	Altering physical grip to change line weight.
Week 2	Colour Mixing	Primary colours mix to form secondary.	Systematically testing paint ratios on a palette.
Week 3	Colour & Mood	Warm vs. cool colour groups and moods.	Selecting a palette to communicate identity.
Week 4	Art History (Pop Art)	Roy Lichtenstein style; Ben-Day dots.	Emulating historic print media techniques.
Week 5	Texture & Collage	Tactile textures; wax/water resist.	Layering mixed media and cutting forms.
Week 6	Evaluation	Exhibition layout; critique language.	Reflecting on process and delivering feedback.

Why This Art Curriculum Matters
1. It Transitions Children from Accidental to Intentional Creation

Without a firm base of substantive and disciplinary art knowledge, young children create purely by chance—grabbing whatever marker is closest and giving up if it doesn't look perfect. This MTP equips them with an intentional toolkit. By giving them a superhero theme, they learn to stop and think: *"My hero is sneaky, so I will choose a cool colour palette and thin, sharp lines."* It gives them deliberate, rewarding control over their own self-expression.

2. It Reframes 'Mistakes' as Crucial Points of Discovery
Children often get deeply frustrated when their hands cannot perfectly replicate what is in their heads. The disciplinary focus on the *sketchbook process* completely changes this mindset. By treating the sketchbook as a low-stakes testing lab, children learn that running out of paint space, colours bleeding into one another, or lines going astray are simply data points. They build cognitive resilience, learning to adapt, troubleshoot, and look at their work with an objective, analytical eye.

3. It Teaches the Hidden Code of Visual Literacy
We live in an incredibly visual world flooded with logos, character branding, animations, and app icons. By understanding how colours, line thickness, and shapes change how a viewer feels, children learn to crack the code of visual communication. They move from passively consuming media to actively understanding *how* media is designed to influence them, building foundational critical thinking skills that stretch far beyond the art room.

Assessment Indicators

Developing (Working Toward)	Secure (Expected Standard)	Greater Depth (Exceeding)
Uses tools with uniform pressure, resulting in faint or accidental lines. Mixes colours randomly, resulting in muddy brown tones. Struggles to use a sketchbook for planning, wanting to start directly on the final sheet.	**Alters grip pressure purposefully** to change line weight. Successfully **mixes primary colours to form clean secondary colours.** Intentionally chooses **warm or cool tones** to match a character's mood. Uses a sketchbook to test ideas.	Masterfully controls paint loads to keep shapes and lines crisp. Fluidly explains how chemical properties interact (like wax-resist). Naturally adapts historical styles (like Pop Art) into unique work. Gives deep, highly articulate technical feedback to peers.

Other Information, Ideas and Resources

Character Creation & Design:

Mask Making: Provide various materials like cardstock, felt, feathers, glitter, and elastic. Children can design and create their own unique superhero masks, focusing on shape, colour, and embellishments that reflect their hero's powers or personality.

Costume Design: Using paper, fabric scraps, yarn, and glue, children can design and decorate miniature superhero costumes. They can draw their designs first and then bring them to life with the materials. This encourages thinking about form and texture.

Superhero Silhouettes: Cut out simple superhero shapes from black cardstock. Children can then decorate these silhouettes with bright collage materials to represent their hero's outfit and powers. This focuses on positive and negative space and bold visual impact.

Handprint Heroes: Children can create superhero characters using their handprints as the base. By adding details with paint or markers, each finger can become a different part of the hero's body or costume. This is a fun and personal approach.

Drawing Superpowers: Encourage children to draw their superheroes in action, focusing on how they visually represent their special powers. For example, wavy lines for super speed, starbursts for energy blasts, or swirling lines for flight.

Setting the Scene & Storytelling:
Superhero Cityscapes: Using cardboard boxes, tubes, and paper, children can construct a model cityscape for their superheroes to inhabit. They can paint and decorate the buildings, adding details like windows and aerials. This develops spatial awareness and construction skills.

Comic Strip Creation: Introduce the basic elements of a comic strip (panels, speech bubbles). Children can draw simple scenes of their superheroes in action, adding text to tell a short story. This combines visual art with narrative.
Superhero Headquarters: Using recycled materials like plastic bottles, yogurt pots, and straws, children can design and build a secret headquarters for their superheroes. This encourages imaginative play and problem-solving in construction.

'Pow!' and 'Zap!' Action Words: Explore different ways to visually represent action words like "Pow!", "Zap!", and "Zoom!". Children can experiment with different fonts, sizes, colours, and outlines to create dynamic word art.

Backgrounds for Action Figures: Provide large sheets of paper or cardstock, and encourage children to create dynamic backgrounds for their superhero toys using paint, collage, or crayon. They can think about perspective and creating a sense of movement.

Exploring Materials & Techniques:
Super Slime: Introduce the science behind slime making while connecting it to a superhero's gooey or sticky powers. Children can experiment with different colours and textures.

Capes with Fabric Dye or Paint: Using simple fabric squares, children can decorate their own superhero capes with fabric markers, paint, or safe tie-dye techniques. This introduces working with textiles.

Clay Superheroes: Children can sculpt simple superhero figures using air-drying clay, focusing on basic shapes and adding details with tools. Once dry, they can paint their creations.

Printing Superhero Symbols: Create simple printing blocks using potatoes, sponges, or cardboard. Children can then print their own superhero symbols onto paper or fabric.

Considerations for Implementation

Computing

Substantive Knowledge

In Key Stage 1 Computing, **substantive knowledge** covers the foundational technical facts, precise terminology, and concepts that make technology work. It spans three core pillars: Computer Science (coding), Information Technology (using programs), and Digital Literacy (staying safe). Using the

'Superheroes' learning theme grounds these abstract concepts. Children discover that computers don't have magical powers; instead, they rely on precise, human-written instructions to solve puzzles and protect information.

1. Computer Science: Programming and Algorithms
Children learn how machines read, interpret, and execute commands.

The Substantive Base: Knowing that an **algorithm** is a precise, step-by-step set of instructions used to solve a problem or achieve a goal. Knowing that a computer cannot think for itself and will only do *exactly* what it is told. Knowing that an error in code is called a **bug**, and fixing it is called **debugging**.

Learning Theme Application:
The Concept: Children write an algorithm to help a superhero navigate a grid map to bypass obstacles and trap a villain.
The Knowledge: They learn that directional commands (**forward, backward, left turn, right turn**) must be given in a strict, chronological sequence. If the superhero hits a wall because a step was missed, they identify the precise "bug" in their sequence and fix it.

2. Information Technology: Creating and Storing Data
Children learn how to interact with software to manipulate digital text, imagery, or sound.

The Substantive Base: Knowing how to use hardware inputs (**keyboard, mouse, touchscreen**) to operate a device. Knowing that digital content can be created, saved, retrieved, and edited. Knowing basic tool names like **text box, paint brush, undo, and save**.

Learning Theme Application:
The Concept: Operating an identity profile or comic card for their superhero character.
The Knowledge: Children learn that pressing specific keys on a keyboard prints distinct characters on a screen. They learn that clicking the "undo" tool reverses a mistake, and clicking "save" preserves their digital profile in the computer's memory so a teacher can retrieve it next week.

3. Digital Literacy: Safety and Secret Identities
Children learn how to protect themselves, their hardware, and their personal records in a connected world.

The Substantive Base: Knowing what **personal information** is (full name, home address, school, phone number, private photos) and that it must be kept private online. Knowing to instantly tell a trusted adult if something on a screen looks strange, scary, or wrong.



Digital Literacy: Distinguishing Between Public and Private Information. Source: Exciting Teacher

Learning Theme Application:
The Concept: Connecting online safety to a superhero's "Secret Identity."
The Knowledge: Just like a superhero wears a mask to keep their real identity safe from villains, children learn that they must use a "digital mask" online. They master the rule that they should use a fun nickname or custom cartoon **avatar** instead of their real name and photo when creating a gaming profile or working on shared educational sites.

Why Substantive Computing Knowledge Matters

1. It Demystifies Technology and Combats 'Screen Magic'
Young children are digital natives who grow up swiping screens, but they often treat technology like magic. Substantive knowledge pulls back the curtain. When a child learns that a programmable toy or an app moves solely because an engineer wrote an algorithm, their perspective shifts. They stop seeing devices as magical windows and start seeing them as human-designed tools that operate on logic.

2. It Empowers Children to Become Content Creators, Not Just Consumers
Many children use devices purely to stream videos or play pre-built games. Learning the vocabulary of inputs, saving, algorithms, and formatting tools shifts them into the driving seat. Understanding that *they* can type text, modify a brush size, or sequence commands turns them from passive consumers of digital media into active creators who can use computers to bring their own ideas to life.

3. It Establishes Uncompromising Safeguards Early On
As children gain access to connected devices at younger ages, knowing how to spot and protect sensitive data is an essential life skill. Framing online safety around a superhero's secret identity teaches them *why* privacy rules exist without making them feel afraid. It embeds healthy digital habits right at the start of their journey, ensuring they protect their personal information automatically.

Disciplinary Knowledge

While substantive knowledge in computing teaches children the vocabulary and facts—like knowing what an algorithm is or defining personal information—**disciplinary knowledge** is the active process of *thinking*

and acting like a computer scientist. In Key Stage 1, this means breaking complex problems down into small parts, systematically hunting for bugs, testing predictions, and making logical choices about how to use technology safely. Using the learning theme of **'Superheroes'** turns abstract logic into an exciting, hands-on rescue mission. Children don't just memorise computer terms; they actively use computational thinking to solve problems.

Core Disciplinary Computing Practices Applied to 'Superheroes'

A. Logical Reasoning & Decomposition (Breaking Down the Mission)

The Disciplinary Practice: Deconstructing a large problem into smaller, manageable steps (decomposition) and using logical reasoning to predict what will happen when a sequence of commands is run.

Learning Theme Application:

The Context: Programming a floor robot (like a Bee-Bot dressed as a superhero) to travel across a mat to save a civilian trapped by a villain.

The Disciplinary Action: Instead of guessing and pressing random buttons, children decompose the route. They break the journey down: *"First, the hero must go forward 3 steps. Second, they must turn right to avoid the lava pit. Third, they must go forward 2 steps."* Before hitting the 'Go' button, they use logical reasoning to trace the path with their finger to predict if their instructions will succeed.

B. Analytical Debugging (Fixing the Superhero's Path)

The Disciplinary Practice: Systematically reading through a sequence of instructions when something goes wrong, identifying the exact point of failure, and correcting it rather than wiping everything out and starting over.

Learning Theme Application:

The Context: The superhero robot accidentally turns left into an obstacle instead of right toward the villain's lair.

The Disciplinary Action: Children act like software testers. They do not clear the whole program in frustration. Instead, they re-run the code step-by-step (*"Step 1 worked... Step 2 worked..."*), isolate the incorrect command (*"Ah, step 3 says turn left, but the hero needs to turn right!"*), and systematically debug that specific instruction.

C. Evaluation and Tinkering (Selecting the Right Digital Tool)

The Disciplinary Practice: Experimenting with software features through purposeful "tinkering" to find out what tools do, and evaluating which digital asset is best suited to achieve a goal.

Learning Theme Application:

The Context: Creating a digital comic strip badge or profile for a superhero.

The Disciplinary Action: Children tinker with a painting or word-processing program. They evaluate their choices: *"Does the text tool or the brush tool work better to make my hero's name look loud and powerful?"* They make a conscious decision to use a thick, bright red fill tool for an energetic blast effect rather than a thin pencil tool, evaluating the visual outcome based on their original goal.

Substantive vs. Disciplinary: The 'Superheroes' Computing Split

Substantive Computing Knowledge (The Facts)	Disciplinary Computing Knowledge (The Process)

Knowing that an **algorithm** is a precise set of step-by-step instructions.	**Writing, sequencing, and testing** an original algorithm to guide a superhero through a maze safely.
Knowing that a computer error is called a **bug**.	**Isolating and fixing a specific error** in a code sequence when the robot hits a wall.
Knowing that you should use a digital mask or **avatar** online to protect your identity.	**Evaluating a list of usernames** to decide which ones are safe (e.g., *SuperSkater12*) and which ones give away private information (e.g., *Sam_Smith_Holt_2019*).

Why Disciplinary Computing Knowledge Matters

1. It Builds High Levels of Resilience and Problem-Solving Stamina

When children write code or work with technology, things rarely work perfectly on the first try. Disciplinary computing teaches them that errors aren't personal failures—they are just "bugs" that need to be found. This perspective shifts their mindset from *"I'm bad at this, my robot didn't move right"* to *"There's a bug in my code, let me hunt it down."* This problem-solving stamina directly transfers to other subjects like Mathematics and reading.

2. It Teaches Systems Thinking and Precision

Computers are entirely literal; they do exactly what they are told, not what we *meant* for them to do. By practicing disciplinary computing, children learn the absolute necessity of precision. If they tell a robot to move forward twice when it needs to move three times, the mission fails. This teaches young minds to think systematically, pay close attention to chronological sequence, and understand that small details have a huge impact on final outcomes.

3. It Promotes Active Agility Over Static Screen Consumption

Technology changes at a lightning pace—the software children use in Key Stage 1 will likely look entirely different by the time they start high school. Substantive facts about a specific app can quickly become outdated. However, disciplinary knowledge—knowing how to tinker safely, how to evaluate a menu, how to logically predict outcomes, and how to debug—gives children an agile, permanent framework. It ensures they can confidently approach any new technology or software they encounter in the future.

Key Stage 1 Superhero Computing Disciplinary Progression Indicators

The Pupil is Not Yet Disciplinary If...	**They Are Demonstrating Disciplinary Thinking If...**
When their programmable superhero toy goes the wrong way, they get upset, clear all the buttons, and repeatedly smash inputs hoping it randomly works next time.	They pause the robot, look at the route, and say: *"It did the first two steps perfectly, but it turned the wrong way on step three. I need to change just that one turn command."*
They treat digital safety as a list of abstract school rules they memorise but don't apply when given a choice on a device.	They actively protect their privacy when building a superhero game profile, picking a nickname and an animated costume icon while explaining: *"I*

The Pupil is Not Yet Disciplinary If...	They Are Demonstrating Disciplinary Thinking If...
	can't use my real photo because it's a secret identity."
They blindly follow a teacher's exact button-clicks on a screen without looking at what the tools actually do or trying to alter them.	They purposefully explore the software interface, saying: *"I wondered what this button did, so I clicked it and found out it makes my superhero's cape look blurry and fast!"*

Learning Objectives

1. Programming (Algorithms and Logic):
Objective: Understand what algorithms are; create and debug simple programs.
Superhero Link:
Designing a Superhero's Path: Children can create a sequence of instructions (an algorithm) for a 'superhero robot' to navigate a maze, rescue a toy, or catch a 'villain' (e.g., using directional arrows or simple coding blocks like 'move forward', 'turn left').
Superhero Training Programs: Write simple algorithms for a superhero's training routine (e.g., "Jump 3 times," "Spin twice," "Fly forwards").
Debugging a Mission: If a 'superhero program' doesn't work (e.g., the robot gets stuck), children can identify the 'bug' (error) and 'debug' (fix) the sequence of instructions.
Simple Control: Using programmable toys (e.g., Bee-Bots) to make a superhero move to specific locations on a map to complete a 'mission'.

Objective: Use logical reasoning to predict the behaviour of simple programs.
Superhero Link:
Predicting a Power: "If my superhero presses this button, what power will they use? What will happen next?"
Mission Planning: Predicting where a 'superhero robot' will end up if it follows a given set of instructions.

2. Data and Information (Digital Content):
Objective: Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
Superhero Link:
Creating a Superhero Profile: Children can use a simple word processor or drawing software to create a digital profile for their superhero (name, powers, costume design, secret identity). They can type in text and insert images.
Designing a Superhero Symbol/Logo: Using drawing software (e.g., Paint, Google Drawings) to design their superhero's unique symbol or logo.
Creating a 'Rogue's Gallery' / 'Hero Database': Creating simple digital files (e.g., using a presentation slide per character) to store information about different heroes and villains.
Taking 'Mission Photos': Using a tablet or digital camera to take pictures of their superhero creations or role-play, then storing and reviewing them.

3. Networks and Communication (Online Safety):
Objective: Recognise common uses of information technology beyond school.
Superhero Link:
Superhero Communication: Discussing how superheroes might use technology to communicate (e.g., 'Bat-phone', digital alerts, video calls from space). Link this to real-world communication devices like phones, tablets, and computers.
Emergency Services: Discussing how real-life heroes (like emergency services) use technology to respond to calls for help.

Objective: Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Superhero Link:
Secret Identities and Privacy: Discussing why superheroes keep their secret identities private. Relate this to keeping personal information (name, address, photo) private online.
'Sidekick' Safety Rules: Creating a list of "Online Safety Rules for a Superhero's Sidekick" (e.g., "Don't tell strangers your real name," "Ask a grown-up if you see something scary").
Reporting Bad Guys (Online): Discussing how a superhero would report something dangerous or unkind. Relate this to telling a trusted adult if they see something upsetting online.

4. Technology in the World:
Objective: Understand that programs execute by following a sequence of instructions; understand what algorithms are. (Reinforces programming but with a broader real-world link).
Superhero Link:
Superhero Gadgets: Discussing how superhero gadgets (e.g., a grappling hook, a jetpack) work by following specific instructions or steps.
Smart Headquarters: Imagining how a superhero's headquarters might use technology (e.g., automated doors, security systems, computers to analyse data), all of which rely on programmed instructions.

Lesson Ideas

Here is a complete, 6-week Medium-Term Plan for Key Stage 1 Computing using the learning theme **'Superheroes'**. This plan integrates the three core strands of the National Curriculum—**Computer Science** (algorithms and coding), **Information Technology** (using digital tools), and **Digital Literacy** (safety and privacy)—while explicitly separating facts from hands-on computational practices.

Theme: Superhero Code Academy
Duration: 6 Weeks (1 Hour per week)
Core Tool Focus: Unplugged Coding, Floor Robots (e.g., Bee-Bots or Blue-Bots), and Basic Digital Paint/Text Applications

The 6-Week Superhero Computing Scheme
Week 1: Unplugged Training (Algorithms & Instructions)
Substantive Knowledge (What to learn):
Know that computers do not have brains; they cannot think for themselves.
Know that an **algorithm** is a precise, step-by-step set of instructions designed to solve a problem or complete a task.
Know that commands must be given in the correct order for the algorithm to work.

Disciplinary Knowledge (How to act like a computer scientist):
Decomposition: Break a physical movement sequence down into clear, individual, step-by-step instructions.
The Studio Task: *Superhero Training Ground.* Children act as "programmers" and "superhero robots." Using paper arrow cards (**Forward, Backward, Left Turn, Right Turn**), programmers write a physical floor algorithm to steer their superhero partner around toxic sludge cones to rescue a teddy bear, testing their instructions out loud.

Week 2: Programming the Bot (Translating Code to Hardware)
Substantive Knowledge (What to learn):
Know that a floor robot is a type of computer hardware that executes code.
Know that **inputs** (buttons on the robot's back) store a sequence of commands, and a clear button wipes the memory clean.
Know that a computer reads and executes commands exactly as entered.
Disciplinary Knowledge (How to act like a computer scientist):
Logical Reasoning: Predict the path and final landing spot of a programmable device by reading a sequence of button commands beforehand.
The Studio Task: *The Villain's Secret Lair.* Using a floor robot dressed up with a paper superhero cape, children look at a grid map. They write an algorithm on mini-whiteboards to navigate the bot from HQ to the villain's cage, pointing at the code to predict where the robot will turn before pressing 'Go'.

Week 3: Target De-Bugging (Isolating Code Faults)
Substantive Knowledge (What to learn):
Know that an error or mistake in a computer program is called a **bug**.
Know that finding and fixing an error is called **debugging**.
Understand that code errors are normal parts of software design.
Disciplinary Knowledge (How to act like a computer scientist):
Analytical Debugging: Systematically trace a program step-by-step to isolate an error, correcting only the broken piece rather than clearing the whole code string.
The Studio Task: *The Glitchy Gadget.* The teacher intentionally gives students a broken algorithm card that causes their superhero robot to crash into a mountain obstacle on the map. Pupils run the code slowly, match the robot's physical step to the card, locate the exact "buggy arrow," and swap it out to fix the rescue mission.

Week 4: The Secret Identity (Digital Literacy & Privacy)
Substantive Knowledge (What to learn):
Know that **personal information** includes data like your full name, home address, school name, phone number, and private photos.
Know that personal information must be kept secure and private online.
Know that an **avatar** is a digital cartoon or character used to represent a real person safely.
Disciplinary Knowledge (How to act like a computer scientist):
Risk Evaluation: Assess text strings and images to categorise them into "safe to share" or "keep private under lock and key."
The Studio Task: *The Hero's Secret Identity.* Children explore why superheroes wear masks to protect their families. They are presented with a series of digital identity tags. They evaluate them, sorting them into "Villain Traps" (e.g., *Jack_Jones_Blakeney_Primary*) and "Safe Hero Identities" (e.g., *LaserLeaper99*), and choose a safe profile nickname and custom avatar for themselves.

Week 5: Creating the Hero ID Badge (Information Technology Inputs)
Substantive Knowledge (What to learn):
Identify hardware inputs: the **keyboard** prints letters, the **mouse/trackpad** navigates a pointer, and a **touchscreen** responds to finger pressure.
Identify software interface icons: **Text box [T], Fill tool (paint bucket), Undo arrow, and Save**.
Disciplinary Knowledge (How to act like a computer scientist):
Purposeful Tinkering: Explore paint and text tools by experimenting with layouts, correcting input errors with the delete/backspace keys or undo buttons.
The Studio Task: *HQ ID Badges.* Using a basic publishing or paint tool, children design a superhero ID badge. They type their safe superhero nickname using a keyboard, tinker with font sizes, and use the fill tool to paint a custom background cape, learning to use the 'undo' tool to reverse design mistakes.

Week 6: Saving & Retrieving the Data (The File System)
Substantive Knowledge (What to learn):
Know that digital work must be **saved** to an organised space so it isn't permanently erased when the machine loses power.
Know that files are given a name so they can be searched for, opened, and looked at again later.
Disciplinary Knowledge (How to act like a computer scientist):
Digital Organisation: Independently navigate a digital file path to save a creation into a specific classroom folder and retrieve it.
The Studio Task: *Archiving the Mission.* Children learn how to click the 'Save As' disk icon, type a descriptive file name for their ID badge, and store it in the shared 'KS1 Superheroes' folder. They close the app, shut down the device, reboot it, and practice navigating back through the folder tree to reopen their work for a final peer show-and-tell.

Curriculum Matrix

WEEK	COMPUTER STRAND	SUBSTANTIVE KNOWLEDGE (The Facts)	DISCIPLINARY KNOWLEDGE (The Logic)
Week 1	Computer Science	Algorithms are step-by-step instructions.	Decomposing physical paths into micro-steps.
Week 2	Computer Science	Inputs enter code; bots execute literally.	Predicting paths using logical reasoning.
Week 3	Computer Science	Errors are "bugs"; fixing code is "debugging".	Tracking down and fixing broken instruction commands.
Week 4	Digital Literacy	Personal info must be kept secret online.	Critiquing and filtering identity profiles.
Week 5	Information Technology	Keyboard/mouse are inputs; interface tools.	Tinkering with text and colour assets.
Week 6	Information Technology	Saving files preserves data in folders.	Navigating file directories to open work.

Why This Computing Curriculum Matters
1. It Demystifies Technology ('Screen Magic' vs. Human Logic)
Young children interact with smart devices daily, but they often believe apps and games run via magic. This MTP pulls back the curtain. By learning that a superhero robot only moves because *they* sequenced arrow keys, or that an app draws a circle because a text command was executed, children realise technology is entirely literal. They stop viewing screens as magical windows and start viewing them as configurable tools built on human logic.

2. It Normalises Failure and Builds Critical Resilience
In many academic subjects, making a mistake can feel discouraging. Computing fundamentally flips this narrative. By defining errors as natural "bugs," this curriculum teaches children that a program failing to work on the first try is standard procedure. Isolating a bug on a superhero grid map builds deep mental resilience, turning a frustrating roadblock into an engaging puzzle-solving game.

3. It Instils Instinctive Self-Protection Habits Early
As children gain independent access to online gaming and school learning hubs, knowing how to spot and protect sensitive data is a critical life skill. Framing online safety around a superhero's "secret identity mask" makes privacy rules clear and memorable without causing fear. It installs healthy digital habits right at the start of their technology journey, ensuring they protect their personal information automatically.

Assessment Indicators

Developing (Working Toward)	Secure (Expected Standard)	Greater Depth (Exceeding)
Enters robot commands randomly without planning a route. Struggles to see where an algorithm went wrong. Accidentally mixes up personal details with public nicknames. Requires heavy support to find the save button.	**Writes a clear, multi-step algorithm** for a floor bot. **Predicts travel paths** using a finger. **Isolates and debugs a single command error**; selects a safe user profile avatar. Typed characters can be edited using the keyboard. **Saves and opens files independently**.	Easily breaks complex grid paths down into tight, optimised code. Spots bugs instantly by reading raw arrow cards before the robot even runs. Articulates exactly why specific data points (like a home address) are unsafe online. Navigates file structures with minimal guidance.

Other Information, Ideas and Resources

Unplugged (No Computer Needed):
Superhero Algorithm: Create a sequence of actions a superhero needs to take to save the day (e.g., "Fly to the building," "Open the door," "Rescue the cat"). Children can draw pictures or act out the steps. This introduces the idea of algorithms as a set of instructions.

Superhero Maze Challenge: Design a simple maze on paper. Children can then write down or use directional arrows (up, down, left, right) to guide their superhero through the maze to reach a goal. This reinforces the concept of sequencing and debugging (if their instructions don't work!).

Superhero Sorting: Give children cards with different superhero characteristics (e.g., "Can fly," "Has super strength," "Wears a cape"). They can sort these cards into groups based on shared characteristics, introducing the idea of data classification.

Superhero Pattern Power: Use coloured blocks or drawings of superhero symbols to create simple repeating patterns (e.g., red cape, blue mask, red cape, blue mask). Children can identify the pattern and continue it, introducing the concept of repetition in programming.

Superhero Storytelling with Binary: Represent simple words or actions (like "fly" or "punch") with 0s and

1s. Children can then create short superhero stories using these binary codes, giving them a very basic introduction to how computers store information.

Plugged In (Using Computers or Tablets):
Superhero Digital Drawing: Use simple drawing software to design their own superhero, focusing on symmetry, colour choices, and adding digital details. This develops their digital literacy and creative expression.

Superhero Animation: Introduce block-based coding apps (like ScratchJr or Kodable) where children can drag and drop blocks to make their superheroes move, jump, and perform actions. This is a fun and visual way to learn basic programming concepts like sequencing, loops, and events.

Superhero Game Creation (Simple): Some block-based coding platforms allow for very simple game creation. Children could program their superhero to collect items or avoid obstacles using basic controls.

Superhero Storytelling with Digital Tools: Use simple presentation software or digital storytelling apps to create a short story about their superhero, incorporating text, images, and even simple animations. This integrates literacy with digital skills.

Superhero Research (Guided): With careful supervision, children could use child-friendly search engines to find out about real-life heroes (e.g., firefighters, doctors) and discuss how they use their "powers" to help others. This promotes information literacy.

Cross-Curricular Connections:
Literacy: Writing superhero stories, creating character profiles, designing comic strips.
Art & Design: Designing superhero costumes and logos, creating digital artwork.

Considerations for Implementation

Design & Technology

Substantive Knowledge

In Key Stage 1 DT, **substantive knowledge** consists of the technical facts, physical rules of materials, vocabulary, and safety guidelines that allow children to build functioning products. While art focuses on visual self-expression, DT is fundamentally about **utility**—making objects that perform a specific task for a user. Using the '**Superheroes**' learning theme turns technical concepts (like moving joints, structural stability, or food nutrition) into exciting engineering challenges.

1. Mechanisms: Levers, Sliders, and Moving Parts
Children learn how to make flat surfaces and materials move dynamically.

The Substantive Base: Knowing that a **mechanism** is a system of parts that work together to create movement. Knowing that a **slider** moves in a straight line (back and forth or up and down), while a **lever** rotates around a **pivot** (a fixed point, like a split pin).



Key Mechanism Component: The Brass Split Pin Pivot. Source: | Specialist Crafts

Learning Theme Application:
The Concept: Designing a moving superhero comic page or a mechanical action figure.
The Knowledge: Children learn that a split pin acts as a pivot. By attaching a cardboard "arm" to a body with a split pin, they create a lever. Pushing a pull-tab at the bottom (a slider) makes their superhero's arm pivot upward to throw a punch.

2. Structures: Free-standing Hideouts
Children learn the physical rules of gravity, balance, and reinforcement.

The Substantive Base: Knowing that a structure must be **stable** (not tip over easily) and **strong** (not collapse under weight). Knowing that joining techniques like **folding, tab-joints, and triangulation** make flimsy materials like paper and card rigid and load-bearing.

Learning Theme Application:
The Concept: Building a 3D table top superhero base or rescue tower.
The Knowledge: Children learn that a flat sheet of paper falls over, but folding it into a cylinder or a triangular prism creates a rigid column. They learn that a wider base makes their rescue tower stable, and that masking tape or glue tabs can secure the structure to a baseplate to prevent tipping.

3. Textiles: Custom Superhero Gear
Children discover how to manipulate flexible materials to make functional accessories.

The Substantive Base: Knowing that fabrics have different properties (some are stretchy, some are waterproof, some fray when cut). Knowing that separate pieces of fabric can be joined together using temporary methods (pins, glue, staples) or permanent methods (running stitch).

Learning Theme Application:
The Concept: Constructing a utility belt pocket or custom wrist cuff.
The Knowledge: Children learn that felt does not fray when cut, making it ideal for young designers. They learn that a **stencil** or **template** is a shape used to cut matching pieces of fabric, and that joining the edges with a simple stitch creates a hollow pouch capable of holding a superhero's gadgets.

4. Food Technology: Super-Fuel for Heroes
Children study the foundational rules of nutrition, hygiene, and kitchen tools.

The Substantive Base: Knowing that food comes from plants or animals. Knowing that to stay strong and healthy, we need a balanced diet including **fruits, vegetables, and proteins**. Knowing basic food hygiene (washing hands, washing ingredients) and safe preparation techniques (using the **claw grip** and **bridge hold** to slice safely with a plastic knife).

Learning Theme Application:
The Concept: Designing and making a "Super-Fuel Salad" or energy wrap.
The Knowledge: Children identify which ingredients (like spinach for strength or berries for energy) come from plants. They learn that a bridge hold (forming a bridge with their fingers over the food to cut through the middle) keeps their fingers safe from blades while cutting cucumber slices for their superhero meal.

Why Substantive DT Knowledge Matters
1. It Transitions Children from 'Sticky-Tape Messes' to Structural Thinkers
Without substantive DT knowledge, young children try to solve construction problems by using half a roll of sticky tape to secure a failing joint. Teaching them the physical facts of materials—like folding a tab or using a split pin pivot—gives them genuine engineering solutions. They learn to design with structural intent, resulting in working toys that do not instantly fall apart.

2. It Teaches Functional Purpose and Empathy
In art class, a child might make a sculpture because they like how it looks. In DT, they build a product to solve a real-world problem for a **user**. For example, they might design a gadget holder that *must* fit a specific toy, or a cape that *must* withstand a wind-tunnel fan test. This cultivates practical design empathy: children learn to evaluate their work based on how well it functions, rather than just how pretty it looks.

3. It Demystifies the Built World
Every object we touch—from plastic juice bottles to complex suspension bridges—was planned, tested, and manufactured using these exact design principles. By building basic structures and mechanisms in Key Stage 1, children learn to look at the world around them analytically. They begin to notice the levers on scissors, the tabs on cereal boxes, and the triangular trusses on crane arms, realising that our physical world is deliberately shaped by design logic.

Disciplinary Knowledge

While substantive knowledge in DT provides the technical facts—such as knowing what a pivot is or identifying safe cutting techniques—**disciplinary knowledge** is the active process of *thinking, acting, and evaluating like a designer.* In Key Stage 1, disciplinary knowledge is structured around four iterative actions: **Design, Make, Evaluate, and Technical Knowledge in Action**. Using the **'Superheroes'** learning theme turns these professional workflows into hands-on missions, teaching children how to problem-solve when their physical prototypes fail.

Core Disciplinary DT Actions Applied to 'Superheroes'
A. Designing: Annotating with Purpose (Not Just Drawing)
The Disciplinary Practice: Generating, developing, and communicating design ideas through talk, mock-ups, and drawings. Critically, it involves moving past drawing a generic picture to drawing an *annotated diagram* that explains how an object will actually work and what it is made of.

Learning Theme Application:
The Context: Designing a protective wrist gauntlet or a gadget pouch.
The Disciplinary Action: Instead of just colouring a picture of a superhero arm, children draw a plan and label its functional features. They talk through their choices with a partner: *"I have drawn a paper tab here because that is where the strap will join the cuff,"* or *"I am labelling this part 'felt' because it needs to be soft against the hero's skin."*

B. Making: Tool Selection and Material Economy
The Disciplinary Practice: Selecting from and using a range of tools and equipment to perform practical tasks (such as cutting, shaping, joining, and finishing). It means choosing a tool because it is the *right* tool for that specific material, and measuring or cutting with care to avoid wasting resources.

Learning Theme Application:
The Context: Cutting out and assembling a 3D cardboard superhero vehicle or vehicle trap.
The Disciplinary Action: Children look at their materials and select tools intentionally. They realise that standard school scissors can easily cut paper but will warp corrugated cardboard, choosing a heavier pair of safety shears instead. They position their stencils at the edge of the cardboard sheet to save material, rather than cutting directly out of the middle.

C. Evaluating: Testing Against a Design Criteria
The Disciplinary Practice: Investigating and analysing existing products, and evaluating their own original ideas and products against a strict **design criteria** (a checklist of what the product *must* do). It means moving past subjective judgments like *"I like my toy because it's blue"* to objective feedback like *"My toy works because the slider successfully moves the cape."*

Learning Theme Application:
The Context: Building a free-standing rescue tower or superhero hideout.
The Disciplinary Action: Children test their structure against a pre-agreed criteria (e.g., *It must stand on its own, it must hold a 50g superhero toy at the top, and it must withstand a 'wind gust' from a paper fan*). If the tower falls over during the fan test, the child acts like an engineer: they evaluate the failure, identify that the base is too narrow, and reinforce it.

Substantive vs. Disciplinary: The 'Superheroes' DT Split

Substantive DT Knowledge (The Facts)	Disciplinary DT Knowledge (The Process)
Knowing that a **slider** moves back and forth in a straight line inside a track.	**Cutting a straight slit** into a piece of card, threading a tab through, and testing if it glides smoothly without snagging.
Knowing that the **bridge hold** is a safe way to steady a vegetable with your fingers while cutting.	**Safely cutting a real banana** or cucumber using the bridge hold to ensure fingers remain uninjured during a food prep lesson.
Knowing that **corrugated card** is stronger and more rigid than standard sugar paper.	**Testing and selecting** corrugated card over paper to build a load-bearing bridge that won't collapse under a toy vehicle.

Why Disciplinary DT Knowledge Matters

1. It Transforms Mistakes into Iterative Engineering Successes

In many primary subjects, a broken or failing piece of work can feel disheartening. Disciplinary DT changes that completely. When a superhero vehicle wheel falls off or a lever jams, children learn that product failure is just data. It forces them to analyse *why* the glue failed or *why* the pivot was too tight. This builds deep mental resilience and teaches children how to iterate—altering and improving a design until it functions perfectly.

2. It Cultivates Spatial Awareness and Manual Dexterity

We live in an increasingly digital world where young children spend hours swiping flat screens. Disciplinary DT is a vital physical antidote. Pushing a metal split pin through thick card, manoeuvring a plastic knife through food, or wrapping running stitches through felt requires fine motor control, hand-eye coordination, and spatial reasoning. These physical skills build the neural pathways required for precision tasks later in life.

3. It Teaches Practical Critical Thinking for Real-World Problem Solving

Disciplinary knowledge stops children from being passive consumers of products and turns them into critical analysts. By evaluating why certain materials fail or succeed, children begin to look at the engineered world around them differently. They understand that everything—from a zip on their coat to the plastic clasp on their lunchbox—went through a rigorous cycle of designing, physical modelling, and brutal testing to ensure it works for the end user.

Key Stage 1 Superhero DT Disciplinary Progression Indicators

The Pupil is Not Yet Disciplinary If...	**They Are Demonstrating Disciplinary Thinking If...**
When their superhero tower falls over, they cover it in five layers of masking tape without thinking, making a sticky mess that still tips over.	They examine the fallen tower, identify that the top is too heavy for the skinny base, and say: *"I need to fold wide cardboard feet and tape them to the table to stop it tipping."*
They judge their finished superhero costume pouch purely on aesthetics: *"It's the best because it has gold glitter stars on the front."*	They judge their pouch based on its design utility: *"It's successful because the staple seams are tight, meaning my superhero's plastic gadgets won't fall out when I shake it."*
They draw a superhero cape plan that looks like a chaotic, abstract scribble with no labels showing how it will actually be put together.	They draw a clear shape of a cape, use an arrow to point to the top edge, and write or dictate: *"Velcro strip goes here to attach it to the shoulders safely."*

Learning Objectives

1. Design:

Objective: Design purposeful, functional, appealing products for themselves and other users based on design criteria.

Superhero Link: Children will design a superhero gadget, a superhero costume accessory (e.g., a mask, wrist cuffs), or a vehicle for their superhero. The 'purpose' could be to help the superhero fly, protect them, or catch a villain. The 'user' is often themselves or a peer.

Example Activities:

Sketching ideas for a new superhero gadget (e.g., a "light-up communicator" or "super-speed boots").

Drawing designs for a superhero mask, thinking about how it will fit and hide identity.
Discussing what features a superhero vehicle needs (e.g., strong wheels, a way to fly, a secret compartment).

Objective: Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, ICT.
Superhero Link: Children will articulate their design ideas for superhero items, draw them, or create simple models to test concepts.
Example Activities:
Talking about their ideas for a superhero's special power and how a gadget could help them use it.
Drawing a series of designs for a superhero cape, trying out different shapes.
Making a paper 'mock-up' of a superhero belt to see if it fits.

2. Make:
Objective: Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].
Superhero Link: Children will safely use scissors, glue, tape, and possibly simple fastening tools to construct their superhero items.
Example Activities:
Carefully cutting out felt shapes for a superhero emblem.
Joining cardboard pieces with glue or tape to make a superhero gauntlet.
Shaping pipe cleaners to create an alien-catching tool.

Objective: Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.
Superhero Link: Children will choose appropriate materials for their superhero creations (e.g., strong cardboard for a shield, soft fabric for a cape, shiny foil for a futuristic gadget).
Example Activities:
Choosing glittery card for a powerful-looking mask, or strong cardboard for a vehicle chassis.
Selecting fabric scraps of different textures to make a superhero costume patch.
Using elastic for a mask strap or Velcro for a detachable gadget.
3. Evaluate:
Objective: Explore and evaluate a range of existing products.
Superhero Link: Children will look at existing superhero toys, comics, or costumes, discussing what they like, what works well, and what could be improved.
Example Activities:
Looking at pictures of different superhero masks and discussing which ones look most effective for hiding identity.
Discussing how different superhero vehicles might move and why.
Examining existing simple gadgets and talking about their features.

Objective: Evaluate their ideas and products against design criteria.
Superhero Link: Children will reflect on whether their made item meets the initial purpose they designed it for.
Example Activities:
"Does my superhero mask hide my face?"
"Does my superhero gadget light up as I wanted it to?"
"Is my superhero vehicle strong enough to carry a toy?"

Discussing what they would do differently next time.

4. Technical Knowledge:
Objective: Understand how to strengthen, stiffen and reinforce more complex structures.
Superhero Link: While 'complex' is relative, children can begin to explore basic strengthening techniques in their superhero structures.
Example Activities:
Discussing how to make a cardboard shield stronger (e.g., adding an extra layer, folding edges).
Thinking about how to make a rocket stand up without falling over (e.g., a wider base).
Exploring how a tube can be stronger than a flat piece of paper for a telescope.

Objective: Understand that all structures are made of parts.
Superhero Link: Children will identify the different parts of their superhero creations and how they fit together.
Example Activities:
Naming the parts of their superhero costume (cape, mask, emblem).
Identifying the different components of their gadget (button, light, antenna).

Lesson Ideas

Here is a complete, 6-week Medium-Term Plan for Key Stage 1 DT using the learning theme **'Superheroes'**. This plan is structured around a central, highly engaging design brief: **The Superhero Rescue Mission**. It covers the essential disciplines of mechanisms, structures, textiles, and food technology, and provides an integrated progression of technical facts (**substantive**) and practical skills (**disciplinary**).

Theme: Superhero Gadget Lab & Rescue Mission
Duration: 6 Weeks (1 Hour per week)
Core Project: Designing, making, and testing functional products to assist a superhero.

The 6-Week Superhero DT Scheme

WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
Research & Design	Structures (HQ)	Mechanisms (Move)	Textiles (Pouch)	Food Tech (Fuel)	Test & Evaluate
"The Brief"	Fold, Tab, Stability	Pivots, Levers, Pins	Stencils, Felt, Sew	Bridge & Claw Cuts	"Mission Debrief"

Week 1: Designing the Master Plan (Research & Design)
Substantive Knowledge (What to learn):
Know that a **design brief** is a description of a problem that needs a physical solution.
Know that a **design criteria** is a checklist of features that a product *must* have to be successful for its user.
Know that annotations are labels on a drawing that explain materials and how parts work.
Disciplinary Knowledge (How to act like a designer):
Generate design ideas through discussion and quick cardboard mock-ups.
Draw an annotated design diagram, labelling materials (e.g., card, fabric, wood) and joints.
The Studio Task: *The Rescue Mission Brief.* The teacher presents the problem: *Our superhero needs a secure base, a moving rescue gadget, a wearable gear pouch, and high-energy fuel.* Children explore existing toys, establish a shared design criteria checklist, and sketch their first annotated designs on paper.

Week 2: Constructing the Superhero HQ (Structures)

Substantive Knowledge (What to learn):
Know that **stable** means a structure is steady and unlikely to tip over.
Know that flat paper or card can be made rigid and strong by **folding, rolling into cylinders, or forming triangular prisms**.
Know that tabs and masking tape can be used to join a 3D structure to a baseplate.
Disciplinary Knowledge (How to act like a designer):
Manipulate paper and card physically to make them stand upright independently.
Test a structure's stability against a physical force (like a gentle blow or a light weight).
The Studio Task: *The Lookout Tower.* Children are given thin card and paper. Instead of leaving it flat, they practice folding it into triangular columns and rolling it into cylinders. They construct a 3D table top lookout tower that *must* stand completely upright on its own and support a small plastic superhero toy at the top.

Week 3: Crafting the Moving Rescue Crane (Mechanisms)
Substantive Knowledge (What to learn):
Know that a **mechanism** is a system of parts that work together to create movement.
Know that a **lever** is a rigid bar that rotates around a fixed point called a **pivot**.
Know that a brass split pin can act as a physical pivot.
Disciplinary Knowledge (How to act like a designer):
Punch clean holes through card and safely assemble a moving lever joint using a split pin.
Tinker with the placement of the pivot to change how high or far the lever can swing.
The Studio Task: *The Wall-Climbing Rescue Arm.* Children build a mechanical arm for their lookout tower. They cut a cardboard strip (the lever) and attach it to their tower (the base) using a split pin (the pivot). They test it to ensure the arm can swing upward to lift a trapped civilian to safety.
Week 4: Stitching the Utility Pouch (Textiles)
Substantive Knowledge (What to learn):
Know that fabrics have different properties (e.g., felt is soft and does not fray; burlap is rough).
Know that a **template** (or stencil) is a cardboard shape used to trace and cut out matching fabric pieces.
Know that separate pieces of fabric can be joined together using glue, staples, or a simple **running stitch**.
Disciplinary Knowledge (How to act like a designer):
Pin a template to fabric and cut carefully along the lines.
Thread a blunt tapestry needle and weave it up and down through felt to join two edges together.
The Studio Task: *The Wrist-Bound Gadget Pouch.* Children use a cardboard template to trace and cut two identical square pieces of felt. They pin the pieces together and use a simple running stitch (or fabric glue/staples, depending on dexterity) around three sides, leaving the top open to create a functional pocket for their superhero gadgets.

Week 5: Super-Fuel Kitchen (Food Technology)
Substantive Knowledge (What to learn):
Know that all food comes from either plants or animals.
Know that a healthy, active body needs a balanced diet, including plenty of fresh fruits and vegetables.
Know the safety rules of food preparation: wash hands, wash ingredients, and keep fingers away from blades.
Disciplinary Knowledge (How to act like a designer):
Use the **claw grip** (curling fingers like a claw to hold food) and the **bridge hold** (forming a finger bridge over the food to slice through) to cut soft ingredients safely with a plastic knife.
The Studio Task: *The Energy Hero Wrap.* Children design a healthy fruit and vegetable wrap. They select fresh ingredients (plant-based fuels), safely use the claw grip to slice soft bananas or strawberries, and use

the bridge hold to slice cucumbers. They assemble and roll their custom wrap, learning safe food hygiene rules.

Week 6: The Ultimate Field Test (Evaluation)
Substantive Knowledge (What to learn):
Know that **evaluating** means testing how well a finished product works compared to the original design criteria.
Understand that when a product breaks or fails, it provides valuable information on how to make it better.
Disciplinary Knowledge (How to act like a designer):
Test products against a functional checklist (Does the tower stand? Does the lever move? Does the pouch hold items?).
Explain clearly what worked well and what physical modifications would make the design stronger.
The Studio Task: *The Hero Mission Evaluation.* Children set up their towers, mount their levers, wear their pouches, and present their food wraps. They run their superhero toys through a simulated rescue mission. They complete a simple peer evaluation card, detailing exactly how they would change their design if they had to build it again.

Why This DT Curriculum Matters
1. It Transitions Children from 'Chaotic Glue-Messes' to Structural Thinkers
When young children try to make things without structural knowledge, they usually try to fix physical problems with a mountain of sticky tape and wet glue. This MTP teaches them the physical rules of materials. By learning to fold tabs, roll columns, and use split-pin pivots, they develop real engineering solutions, resulting in satisfying, working products that do not instantly collapse.

2. It Destigmatises Mistakes and Promotes Growth Mindsets
In DT, a wheel falling off or a paper bridge bending is not a mistake—it is critical diagnostic data. This curriculum normalises structural failure. By testing their towers against physical weights and analysing why they tipped over, children build emotional resilience, moving from *"My toy broke, I'm bad at this"* to *"The base is too narrow; let me widen it."*

3. It Develops Muscle Memory and Essential Hand-Eye Coordination
In our touch-screen era, children rarely practice physical dexterity. This MTP acts as a vital physical gym. Cutting thick card, manoeuvring a split pin, threading a needle, weaving thread, and safely holding a knife to slice food require precise fine-motor control, building muscular strength and spatial awareness that will serve them for a lifetime.

Assessment Indicators

Developing (Working Toward)	Secure (Expected Standard)	Greater Depth (Exceeding)
Draws pictures without labels. Structures need adult help to stand up. Joins materials randomly (e.g., using tape where a pivot is needed). Struggles with cutting and fine coordination.	**Draws clear, annotated plans.** Uses folds to make card stand independently. **Assembles a moving lever using a split pin.** Cuts fabric using templates.	Annotates plans with multiple, detailed material choices. Builds highly stable structures with reinforced corners. Optimises lever designs for maximum reach. Cuts and stitches fabric with high precision.

Developing (Working Toward)	Secure (Expected Standard)	Greater Depth (Exceeding)
	Safely slices food using claw/bridge techniques. Evaluates work against the checklist.	Suggests precise engineering improvements during testing.

Other Information, Ideas and Resources

Designing and Making Superhero Masks:
Focus: Shape, materials, joining techniques.
Activity: Children can design their own superhero identity and then create a mask to go with it.
Materials: Cardboard, felt, paper plates, string, elastic, glue, tape, scissors, decorative materials (glitter, feathers, etc.).
Process:
Discuss different mask shapes and features.
Children draw their mask design.
They select appropriate materials and cut out the basic shape.
They add details and decorations.
They learn how to securely attach string or elastic so the mask can be worn.
Scaffolding: Simpler shapes for some children, more intricate designs for others. Pre-cut templates can be provided.

Building a Superhero Hideout/Lair:
Focus: Structures, stability, using different materials for a purpose.
Activity: Children work individually or in small groups to design and build a small-scale hideout for their superhero.
Materials: Cardboard boxes, tubes, fabric scraps, straws, tape, glue, construction toys (like LEGO or Duplo), natural materials (sticks, leaves - if appropriate and safe).
Process:
Discuss what a superhero hideout might need (e.g., a lookout point, a place to store gadgets).
Children sketch their designs.
They select materials and begin building, thinking about how to make their structure stable.
They can add features like windows or doors.
Scaffolding: Provide different sized boxes or containers. Some groups might focus on a simple structure, while others add more complex elements.

Designing and Making a Superhero Gadget:
Focus: Mechanisms (simple levers, sliders), purpose of design, using different materials.
Activity: Children invent a gadget that would help their superhero and then try to create a working model.
Materials: Cardboard strips, split pins, straws, string, small containers, buttons, craft sticks, tape, glue.

Process:
Brainstorm different superhero gadgets and their functions.
Children draw their gadget and explain how it works.
They experiment with different ways to join and move materials to create a simple mechanism.
They build a model of their gadget.

Scaffolding: Focus on very simple mechanisms for some (e.g., a sliding door on a small box), while others might try to create a lever-based grabbing tool.

Creating Superhero Vehicles:
Focus: Wheels and axles (simple), structure, movement.
Activity: Children design and build a vehicle that their superhero can use to travel quickly.
Materials: Cardboard boxes or tubes, bottle caps or plastic wheels, straws or dowels for axles, tape, glue, decorative materials.
Process:
Discuss different types of vehicles and how they move.
Children draw their superhero vehicle design.
They learn how to attach wheels to an axle and then to their vehicle body.
They decorate their vehicle.
Scaffolding: Provide pre-made chassis for some children. Others can be challenged to make their vehicle move in a specific way (e.g., roll down a ramp).

Designing Superhero Costumes/Accessories:
Focus: Textiles (simple), joining techniques (tying, sticking), aesthetics.
Activity: Children design and create a part of a superhero costume, such as a cape, wristbands, or a belt.
Materials: Fabric scraps, felt, paper, string, ribbon, Velcro, safety pins (with supervision), glue, tape.
Process:
Look at different superhero costumes and their features.
Children design their costume piece.
They learn simple ways to join materials (e.g., tying fabric for a cape, sticking felt for wristbands).
They decorate their creation.
Scaffolding: Provide pre-cut fabric shapes. Some children can focus on simple decoration, while others try more complex joining.

Considerations for Implementation

Keep it simple: Focus on basic skills and achievable outcomes.
Safety first: Ensure all materials and tools are safe for KS1 pupils and supervise closely.
Focus on the process: Encourage experimentation and problem-solving, not just the final product.
Encourage evaluation: Ask children what worked well and what they might do differently next time.

Geography

Substantive Knowledge

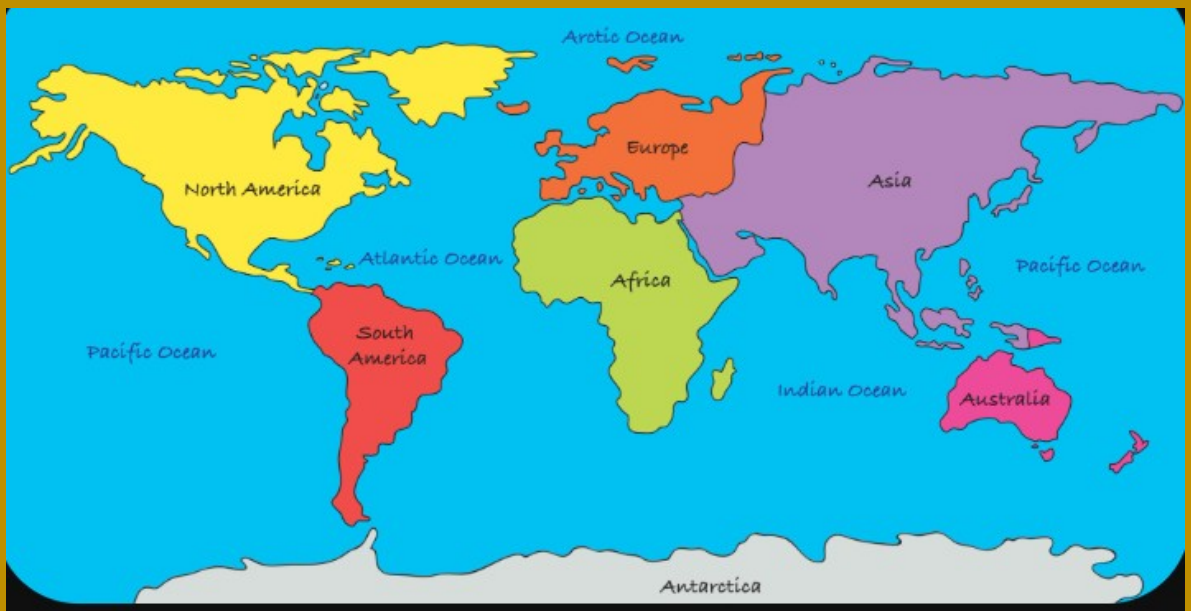
In Key Stage 1 Geography, **substantive knowledge** represents the concrete, factual geographical data that children must memorise and understand. It encompasses specific place names, basic physical features (like oceans or hills), human structures (like houses or factories), and fundamental vocabulary. When connected to the **'Superheroes'** learning theme, abstract concepts like "global locations" or "compass directions" become exciting, concrete missions. A superhero needs to know exactly *where* a crisis is happening, *how* to fly there, and *what* the landscape looks like from the sky.

1. Locational Knowledge: Global & Regional Bases
Children learn to name and locate the massive building blocks of our planet, as well as their own immediate nation.

The Substantive Base: Name and locate the **7 continents** (Asia, Africa, North America, South America,

Antarctica, Europe, Oceania) and the **5 oceans** (Pacific, Atlantic, Indian, Southern, Arctic). Name, locate, and identify the characteristics of the **4 countries and capital cities of the United Kingdom** (England/London, Scotland/Edinburgh, Wales/Cardiff, Northern Ireland/Belfast).

Learning Theme Application:
The Global League: Superheroes have secret bases around the world. Children learn that Spider-Man protects a city in North America, Black Panther rules a nation in Africa, and a cold-weather hero has a fortress in Antarctica.
UK Emergency Calls: The superhero responds to emergencies across the UK. Children must learn that if the villain strikes Edinburgh, they are flying north to Scotland; if the target is Cardiff, they are heading to Wales.



Global Locational Knowledge: The 7 Continents and 5 Oceans. Source: milena moiola / Getty Images

2. Place Knowledge: Contrasting Superhero Environments
Children move past their own immediate experiences to study a completely different location, comparing its daily life and climate.

The Substantive Base: Understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and of a small area in a contrasting non-European country.

Learning Theme Application:
The Comparison: Comparing a hero's local village or town in rural England with a hero's base in a tropical, coastal, or desert environment (e.g., a bustling town in Kenya or an island in the Caribbean).
The Knowledge: Children learn the specific, factual differences in climate (hot vs. cold, rainy vs. dry), housing styles, and landscape features between these two locations, determining how a superhero would have to change their gear to survive there.

3. Human and Physical Geography: Real-World Terrain
Children learn to categorise the natural features of the Earth versus the structures built by people.

The Substantive Base: Identify and use proper vocabulary for:
Physical features: Beach, cliff, coast, forest, hill, mountain, sea, river, soil, valley, vegetation, and weather.
Human features: City, town, village, factory, farm, house, office, port, harbour, and shop.

Learning Theme Application:
The Rescue Terrain: A villain is hiding out! Children must learn to read an environment to describe where the hideout is located. They learn that a *mountain* or *valley* is a physical feature created by nature, whereas the *factory* or *harbour* the villain is hiding inside is a human feature built by construction workers.

4. Geographical Skills & Fieldwork: The Bird's-Eye View
Children learn how a 3D physical landscape is converted onto a flat, symbolic data sheet.

The Substantive Base: Use world maps, atlases, and globes. Use simple compass directions (**North, South, East, West**) and locational/spatial language (e.g., near, far, left, right) to sustain a route. Recognise landmarks and basic human/physical features on a **bird's-eye view** map and use a basic **key** (symbols).

Learning Theme Application:
The Hero Flight Path: Superheroes fly high above cities, seeing the world from a **bird's-eye view** (directly overhead).
The Knowledge: Children learn that a map represents this exact overhead view. They memorise basic map symbols (e.g., a blue line represents a physical *river*, a cross represents a *church*) and use the four compass points to guide a toy superhero across a grid map: *"Fly 2 squares North, then 3 squares East to avoid the volcano."*

Why Substantive Geography Knowledge Matters
1. It Expands the Mind Past the Local Horizon
Young children naturally live in a very small mental bubble centred entirely around their home, school, and local grocery store. Substantive geographical facts break this bubble open. By memorising the names of continents, oceans, and distant capitals, children build a baseline cognitive map of the planet. It introduces them to the massive scale of the wider world and lays the groundwork for global awareness.

2. It Provides the Vocabulary for Precise Communication
Without substantive vocabulary, a child describing an environment is limited to vague phrases like *"the green bumpy bits"* or *"the big water."* Learning precise terms like *valley, cliff, vegetation, harbour,* and *factory* allows children to observe their surroundings and describe them with scientific precision. They learn to categorise the world systematically based on how features were formed.

3. It Decodes Abstract Spatial Symbols
Maps are incredibly complex, abstract graphic layouts. To a young child, a map looks like a chaotic jumble of random lines and shapes. Teaching them the substantive logic of maps—that a bird's-eye view is the perspective of a flying superhero, and that symbols in a key stand for real physical objects—gives them the keys to decode spatial data. This structural understanding is an essential foundation for navigating the physical world throughout their lives.

Disciplinary Knowledge

While substantive knowledge in geography provides the facts—like naming the capital cities of the UK or memorising the seven continents—**disciplinary knowledge** is the practice of *thinking, exploring, and questioning like a geographer.* In Key Stage 1, **disciplinary knowledge** is about teaching children how to gather data, look at a landscape analytically, read the relationship between human and physical

environments, and use tools like maps and compasses to solve spatial problems. Using the **'Superheroes'** learning theme frame, children move from passive listeners to active field agents who must investigate geographic data to complete their rescue missions.

Core Disciplinary Geography Actions Applied to 'Superheroes'

A. Fieldwork & Data Collection: Inspecting the Mission Zone

The Disciplinary Practice: Observing, measuring, and recording the human and physical features of the local area using simple practical methods. Rather than looking at a picture, it involves physically stepping into an environment, noticing patterns, and documenting them systematically using tallies, photos, or simple sketches.

Learning Theme Application:

The Context: Mapping out the safest routes or high-risk crime areas around the school grounds for a superhero patrol.

The Disciplinary Action: Children put on "superhero lenses" and conduct a fieldwork walk around the school playground. They actively classify features: *"Look, the tarmac grid and the brick wall are human features, but the soil patch and the oak tree are physical features."* They record these observations on a simple tally sheet or map overlay to find the best spot for a secret base.

B. Mapwork & Spatial Skills: Plotting the Flight Path

The Disciplinary Practice: Navigating, tracking, and representing space using maps, globes, atlases, and directional compass language. It requires a child to mentally shift perspectives from their ground-level view to a top-down layout, understanding how real-world scaling works.

Learning Theme Application:

The Context: Guiding a flying superhero across a grid map to stop a villain.

The Disciplinary Action: Children do not just point at a map; they use a compass rose to chart a precise course. They dictate directions to a peer using explicit geographical commands: *"The villain is hiding in the city to the North. Fly two steps North, then change direction and head East over the physical river."* They construct their own simple keys, intentionally picking abstract symbols to represent physical blockages.

C. Geographical Inquiry: Asking 'Why is it like this?'

The Disciplinary Practice: Asking and answering geographical questions about the world, recognising patterns, and determining how human behaviour alters the natural landscape.

Learning Theme Application:

The Context: Investigating why a superhero needs completely different gear in an icy environment versus a hot desert environment.

The Disciplinary Action: Instead of just stating that Antarctica is cold, children investigate the *impact* of that climate. They look at satellite images and think like researchers: *"Why are there no roads or cities built here? Because the physical landscape is covered in ice, making it too dangerous for human settlements. The superhero will need a vehicle with tracks, not wheels."*

Substantive vs. Disciplinary: The 'Superheroes' Geography Split

Substantive Geography Knowledge (The Facts)	Disciplinary Geography Knowledge (The Process)
Knowing that the four main directions on a	**Physically rotating a compass tool** or using a

compass are **North, South, East, and West**.	compass rose to orient a map correctly and navigate a route across the playground.
Knowing that a **city** is a crowded human feature and a **forest** is a physical feature filled with vegetation.	**Sorting and categorising** mixed satellite photos of a landscape into "Human" and "Physical" piles, explaining *why* they belong there.
Knowing that **London** is the capital city of England and is located in the south of the country.	**Using an atlas index or globe** to actively hunt down, pinpoint, and circle London's precise location on a blank regional map.

Why Disciplinary Geography Knowledge Matters

1. It Sharpens Critical Observation of the Daily Environment

Children spend much of their time moving passively through the world—buckled into car seats or looking at digital screens. Disciplinary geography forces them to actively *look up and look around*. When they learn how to conduct fieldwork, a simple walk to the park transforms into a data-gathering mission. They notice how the land slopes, where water pools, and how human buildings cut into natural spaces, building acute environmental awareness.

2. It Cultivates Spatial Literacy and Structural Navigation

Navigating a 3D world using a 2D map is an incredibly complex cognitive hurdle for a young child. Disciplinary mapwork builds the abstract mental scaffolding required to bridge that gap. By drawing bird's-eye views and using compass coordinates to guide their superhero toys, children develop strong spatial reasoning, directional memory, and structural navigation skills that prevent them from becoming entirely reliant on digital GPS tools later in life.

3. It Connects Human Behaviour directly to the Physical World

Disciplinary knowledge stops geography from feeling like a static list of boring place names to memorise. It helps children understand *cause and effect*. By investigating why humans build cities near rivers (for water/transport) or why superheroes would struggle to find food in a desert, children begin to realise that the physical shapes of our planet directly control, limit, and inspire human choices.

Key Stage 1 Superhero Geography Disciplinary Progression Indicators

The Pupil is Not Yet Disciplinary If…	**They Are Demonstrating Disciplinary Thinking If…**
They look at a world map and can point to a blue area but say, *"That is just blue paint on the paper."*	They look at the map and explain: *"The blue parts represent the physical oceans, and I can track across them to find the different continents."*
When asked to guide a toy superhero to a target	They use structured spatial layout rules: *"Move the*

The Pupil is Not Yet Disciplinary If...	They Are Demonstrating Disciplinary Thinking If...
on a grid, they use vague, non-geographical language like *"Go over there by the red crayon, up a bit, then turn near the window."*	*hero three grid blocks North, then turn East and cross over the bridge symbol."*
They look at a fieldwork map of the playground and cannot match the drawn boxes to the real-world benches or fences standing in front of them.	They physically orient the map paper to match their body's position, look at a real fence, and say, *"This fence is a human feature, so I will draw a brown line here on my fieldwork sketch."*

Learning Objectives

1. Locational Knowledge:

Objective: Name and locate the world's seven continents and five oceans.

Superhero Link: Superheroes might have headquarters on different continents, or their missions could take them across oceans. Children could locate where various superheroes (or villains) operate from, or trace global journeys.

Activities: Using a globe or world map, children could point to the continent where their superhero lives or where a villain is hiding. They could draw maps showing a superhero's flight path across oceans.

Objective: Name, locate and identify characteristics of the four countries and capital cities of the United Kingdom and its surrounding seas.

Superhero Link: Superheroes might protect specific cities or countries within the UK. Villains might try to cause trouble in these locations.

Activities: Children could identify London as the capital where 'Captain Britain' protects, or discuss coastal superheroes who patrol the surrounding seas. They could create maps of UK cities where superheroes operate.

2. Place Knowledge:

Objective: Understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and of a small area in a contrasting non-European country.

Superhero Link: Superheroes might protect different places. One superhero might protect a quiet English village (local area focus), while another protects a bustling city in a contrasting country (e.g., 'Desert Defender' in a hot desert, 'Arctic Avenger' in a cold polar region). Villains might try to exploit the differences in these environments.

Activities: Children could compare the 'home' environment of their invented superhero (e.g., a city with tall buildings vs. a rainforest with dense trees) and discuss how these environments impact their powers or challenges. They could draw maps showing the physical features of these contrasting places.

3. Human and Physical Geography:

Objective: Identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles.

Superhero Link: Weather can influence superhero missions (e.g., a snowy mission, a sunny beach rescue). Superheroes might have powers linked to weather, or villains might try to control weather. Understanding hot/cold areas helps explain why some superheroes might be 'Ice Warriors' or 'Desert Guardians'.

Activities: Children could create weather reports for a superhero's mission, discussing appropriate clothing/powers. They could draw hot/cold zones on a globe and discuss which superheroes would thrive

there.

Objective: Use basic geographical vocabulary to refer to:
Physical features: beach, cliff, coast, forest, hill, mountain, ocean, river, soil, valley, vegetation, season and weather.
Superhero Link: Superheroes operate in these environments. Villains might hide in forests or on mountains, or battles might take place on beaches or rivers.
Activities: Children could draw maps of a superhero's hideout using these features, or describe a rescue mission using vocabulary like 'the villain fled through the forest and climbed the tall mountain'.

Human features: city, town, village, factory, farm, house, office, port, harbour, shop, station.
Superhero Link: Superheroes protect human settlements and features. Villains might target these places.
Activities: Children could design a 'hero's city' on a map, including human features. They could describe how a superhero helps people in a city or a small village.

4. Geographical Skills and Fieldwork:
Objective: Use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the continents and oceans studied.
Superhero Link: Tracking superhero movements or villain hideouts on a global scale.
Activities: Pinning pictures of superheroes onto their 'home' continent on a large world map or globe. Drawing routes for a superhero's global chase.

Objective: Use simple compass directions (North, South, East, West) and locational and directional language [e.g., near and far; left and right], to describe the location of features and routes on a map.
Superhero Link: Giving directions for a superhero to find a hidden object, navigate a city, or chase a villain.
Activities: Creating a simple map of a superhero's mission, using directional language: "Go North past the tall building, then turn East at the river."

Objective: Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key.
Superhero Link: Superheroes often see the world from above! They use maps to plan their missions.
Activities: Looking at aerial photos of the school grounds (as if a superhero is flying over) and identifying features. Children could draw 'hero maps' of their school or local area, adding symbols for secret hideouts, safe zones, or villain traps.

Objective: Use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.
Superhero Link: Children can be 'local superheroes' protecting their school environment.
Activities: Conducting a 'litter-picking mission' (local fieldwork) and mapping where rubbish is found. Observing human and physical features in the school grounds and drawing a 'hero's map' of these features.

Lesson Ideas

Here is a complete, 6-week Medium-Term Plan for Key Stage 1 Geography utilising the **'Superheroes'** learning theme. This plan is structured around an overarching narrative: **'The Global Rescue Network.'** Over six weeks, pupils transition from local rookie scouts patrolling their school grounds to international flight commanders tracking global climate threats and coordinate missions using map keys, compass directions, and world geography.

Theme: The Global Superhero Rescue Network
Duration: 6 Weeks (1 Hour per week)
Core Project: Developing the mapping, fieldwork, and global literacy skills required to run an international hero defence agency.

The 6-Week Superhero Geography Scheme

WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
Fieldwork Patrol	Bird's-Eye View	UK Flight Paths	Global Alliances	Extreme Climates	Rescue Mission
"HQ Defence Map"	"Mapping Symbols"	"Four Capitals"	"7 Continents / Oceans"	"Hot vs Cold Bases"	"The Final Test"

Week 1: Local Patrol (Fieldwork & Map Making)
Substantive Knowledge (What to learn):
Know that **human features** are structures built by people (e.g., playground fences, school buildings, concrete paths).
Know that **physical features** are natural elements of the environment (e.g., grass fields, trees, soil patches, ponds).
Disciplinary Knowledge (How to act like a geographer):
Observe, categorise, and record physical and human features on a school playground walk using a simple tally sheet.
Sketch a basic site plan representing where these features sit relative to each other.
The Mission: *Mapping Superhero HQ.* Pupils conduct a fieldwork patrol of the school grounds (the "Secret Hero HQ"). Armed with clipboards, they categorise features (e.g., classifying a slide as human, and a bush as physical) to find the safest locations to station sentry guards. They sketch their first "HQ Security Map."

Week 2: Navigating the Airspace (Bird's-Eye View & Compass Work)
Substantive Knowledge (What to learn):
Know that a **bird's-eye view** is a view of the ground from directly above (how a flying superhero sees the world).
Know that a map uses a **key** with simplified symbols to represent real physical and human features.
Know that a compass rose shows the directional points: **North, South, East, and West**.
Disciplinary Knowledge (How to act like a geographer):
Mentally rotate a ground-level view into a bird's-eye view.
Create a simple map key with unique symbols.
Navigate a basic grid using the four cardinal compass directions.
The Mission: *The Rooftop Flight Path.* Pupils look at 3D objects (like toy cars or houses) from directly above to understand bird's-eye perspective. They look at aerial layouts of neighbourhoods to identify houses, parks, and roads. Pupils draw a top-down map of their classroom or a fictional mini-neighbourhood, adding a map key (e.g., a lightning bolt symbol for a "power station") and use a toy superhero to practice flying *North, South, East, and West* across the grid.

Week 3: UK Rescue Flight Paths (National Locational Knowledge)
Substantive Knowledge (What to learn):
Name and locate the **four countries of the United Kingdom** (England, Scotland, Wales, Northern Ireland).
Name and locate the **four capital cities** (London, Edinburgh, Cardiff, Belfast).

Know that the UK is surrounded by seas (North Sea, English Channel, Irish Sea).

Disciplinary Knowledge (How to act like a geographer):

Use an atlas, globe, or digital map to search for, pinpoint, and label specific cities and countries on a blank map of the British Isles.

The Mission: *The UK Defence Grid.* An alarm sounds: a supervillain is causing trouble across the UK! Pupils act as dispatchers in the communications room. They receive distress calls (e.g., *"There is a flood in Edinburgh!"*) and must use an atlas to locate Scotland, plot a flight path from London, and trace the route over land or sea to direct their hero team.



Mapping Perspective: Reading the world from a flying hero's bird's-eye view.
Source: KajaNi / Getty Images

Week 4: Global Alliances (World Locational Knowledge)

Substantive Knowledge (What to learn):

Name and locate the **seven continents** of the world (Europe, Asia, Africa, North America, South America, Antarctica, Oceania).

Name and locate the **five major oceans** (Pacific, Atlantic, Indian, Southern, Arctic).

Disciplinary Knowledge (How to act like a geographer):

Navigate a spinning 3D globe and a flat 2D world map, recognising how they represent the same planet.

Trace massive overland and oceanic pathways to establish travel corridors.

The Mission: *The Global League.* The UK team needs help from global heroes. Pupils study a giant world map and a globe to find the locations of international ally bases. They place pin markers on different continents (e.g., a rainforest hero in South America; a high-tech hero in Asia) and map out which massive oceans their flying heroes must cross to meet at a central summit.

Week 5: Base Camp Climates (Contrasting Environments)

Substantive Knowledge (What to learn):

Know that the **Equator** is an imaginary line around the middle of the Earth where the weather is consistently hot.

Know that the **North and South Poles** are at the very top and bottom of the Earth, where the climate is freezing cold.

Understand how climate dictates human and physical features (e.g., thick snow layers in the polar regions vs. sandy dunes in hot, dry climates).

Disciplinary Knowledge (How to act like a geographer):

Investigate and contrast the climate and landscape features of two distinct environments (e.g., an icy polar region vs. a hot tropical island).

Predict what physical adaptations or gear are required to survive in different geographic zones.

The Mission: *The Extreme Base Challenge.* Pupils help two heroes choose locations for their secret hideouts:

one in icy Antarctica (near the South Pole) and one on a hot island near the Equator. They research both climates, compare the physical landscapes (snow and glaciers vs. beaches and warm seas), and write a checklist of the local environmental hazards their heroes must prepare for.

Week 6: The Ultimate Emergency Test (Inquiry & Synthesis)
Substantive Knowledge (What to learn):
Consolidate all prior substantive knowledge from Weeks 1 to 5: compass directions, map keys, UK capitals, global continents, and contrasting climates.
Disciplinary Knowledge (How to act like a geographer):
Synthesise geographical data to solve a complex, multi-step spatial problem.
Present geographical findings clearly using maps, directions, and precise terminology.
The Mission: *Operation Global Shield.* In this final, hands-on simulation, pupils are given a blank world map showing various crisis zones (e.g., a storm near the Equator, a landslide in Scotland, a blizzard in Antarctica). Working in pairs, they must coordinate a defence plan:

1. Write down which **continents** or **UK countries** the crises are happening in.
2. Use **compass directions** to guide their heroes from HQ to the target.
3. Determine what geographical gear (cold-weather or hot-weather) is required based on the **climate** of the region.
4.

Why This Geography Curriculum Matters
1. It Translates Abstract Lines into Functional Spatial Intelligence
To a 5- or 6-year-old, a map looks like abstract squiggles. By framing the map as a **tactical mission tool**—where a blue line represents a physical river that blocks a superhero's vehicle, or a compass rose dictates their actual movement—children decode the logic of spatial representation. They develop foundational cognitive mapping skills, learning how to translate flat representations of space into real-world action.

2. It Cultivates Environmental Consciousness and Broadens Horizons
Through the exploration of contrasting environments, pupils realise that their local town is just one tiny corner of a massive, diverse planet. By learning about the freezing extremes of the poles and the hot ecosystems near the Equator, they develop an early, vital appreciation for the Earth's delicate physical systems, cultivating natural curiosity and global empathy.

3. It Instils the Power of Active Spatial Inquiry
This curriculum prevents geography from being a dry exercise in memorising static lists of names. Instead, it teaches children *disciplinary agency.* They learn that being a geographer means investigating, walking the ground, asking *"Why is this here?"*, and using collected data to make smart decisions. It turns them into observant, critical navigators of their local communities and the wider world.

Assessment Indicators

Developing (Working Toward)	**Secure (Expected Standard)**	**Greater Depth (Exceeding)**
Struggles to distinguish between human and physical features. Needs guidance to find the UK on a map.	**Correctly classifies human vs. physical features.** Names and locates the 4 UK countries and capitals. **Identifies all 7 continents**	Independently categorises complex or borderline features during fieldwork. Uses precise coordinates to plot multi-step routes on a map grid.

Developing (Working Toward)	Secure (Expected Standard)	Greater Depth (Exceeding)
Confuses compass directions. Struggles to read simplified map symbols.	**and 5 oceans.** Uses North, South, East, West to navigate a grid map. **Explains how the Equator affects climate.**	Explains why cities are located near key physical features (like rivers). Compares and contrasts contrasting climates with detailed vocabulary.

Other Information, Ideas and Resources

Focusing on Location and Mapping:

Superhero Headquarters:

Discuss where different superheroes might have their secret headquarters. Would Superman be in a bustling city like London or New York? Would Aquaman be near the coast? Would a nature-based hero live in a forest or mountains?

Create simple maps of imaginary "Superhero Cities" or regions. Children can draw and label key locations like the "Hero HQ," the "Villain's Lair," a "Danger Zone," and important landmarks.
Use positional language (e.g., next to, behind, under) to describe the location of these places on the map.
Hide superhero figures around the classroom or outdoor area and give children clues using positional language to find them.

Superhero Journeys:

Imagine a superhero needs to travel from their HQ to a place where they need to save the day. Trace simple routes on a map, discussing the different environments they might pass through (e.g., over mountains, across rivers, through a town).

Use directional language (e.g., forwards, backwards, left, right) to give instructions for a superhero's journey.
Introduce the concept of different modes of transport a superhero might use and link them to different environments (e.g., flying over cities, swimming in the ocean, driving through countryside).

Exploring Different Environments:

Superhero Habitats:

Discuss how a superhero's powers might be linked to their environment. For example, a hero with water powers might live near the sea or a large lake. A hero with plant powers might live in a forest.

Explore different types of environments (city, coast, forest, mountains, desert) and discuss the key features of each.
Children can design their own superhero whose powers are linked to a specific environment and describe their habitat.

Weather and Superpowers:

Talk about how weather might affect a superhero's mission. Would it be harder for a flying hero to operate in a storm? Would a hero with ice powers be stronger in cold weather?
Introduce basic weather concepts (sunny, rainy, windy, snowy) and link them to superhero scenarios.
Children can draw pictures of superheroes using their powers in different weather conditions.

Introducing Human and Physical Features:

Saving Landmarks:
Imagine a villain is trying to destroy famous landmarks (e.g., the Eiffel Tower, the Great Pyramid). Discuss what these landmarks are and where in the world they are located.
Look at pictures of different human (e.g., buildings, bridges) and physical (e.g., rivers, mountains) features and discuss their importance.

Helping People in Different Places:
Discuss how superheroes might help people in different types of settlements (e.g., a busy city, a small village). What challenges might people face in these different places?
Introduce the idea of different jobs people do and how superheroes might help them.

Creative Activities:
Design a Superhero Map: Children create their own map of a region where their superhero operates, including key geographical features and locations.
Superhero Environment Dioramas: Children create small scenes in boxes showing their superhero in their natural habitat.
Superhero Adventure Stories: Children write or tell stories about their superhero going on a geographical adventure.
'Where in the World is Our Superhero?' Game: Show pictures of different environments and ask children which superhero might be best suited to operate there.

Considerations for Implementation

History

Substantive Knowledge

In Key Stage 1 History, **substantive knowledge** is the factual substance of the past. It comprises the specific names of people who lived, the dates of key events, the vocabulary used to describe intervals of time (like *decade* or *century*), and the physical differences between then and now.
By using a **'Superheroes'** learning theme, abstract historical concepts come alive. We can pivot the popular child-interest of fictional, caped comic characters toward **'Real-Life Historical Superheroes'**—remarkable individuals who showed extraordinary bravery, changed the world, or saved lives without needing super-strength or the ability to fly.

Core Substantive History Knowledge: The 'Superhero' Framework
Under the National Curriculum for KS1 History, substantive knowledge is divided into three key areas. Here is how they map to the "Real-Life Superhero" learning theme:

A. Significant Individuals: Real-Life Heroes of the Past
The Substantive Base: Know the names, key life facts, and historical impact of significant individuals in the past who have contributed to national and international achievements.

Learning Theme Application:
Florence Nightingale & Mary Seacole (Medical Heroes): Children learn that in the 1800s, hospitals during wars were dirty and dangerous. These two women acted like superheroes by cleaning hospitals, saving thousands of lives, and changing how nursing was done forever.
Harriet Tubman (The Freedom Hero): Children learn that Harriet Tubman escaped from slavery in America and repeatedly risked her life returning to rescue hundreds of others using a secret network of safe houses called the Underground Railroad.

Grace Darling (The Rescue Hero): Children learn that in 1838, Grace Darling spotted a shipwreck from her father's lighthouse in Northumberland and rowed a tiny wooden boat out into a raging storm to save nine stranded survivors.



Historical Significance: Learning about real-life heroes like Harriet Tubman. Source: Wikipedia

B. Changes Within Living Memory: Local Everyday Heroes
The Substantive Base: Know how aspects of national or local life have changed over time, comparing the present day to the lives of their parents and grandparents.

Learning Theme Application:
Emergency Services (Then vs. Now): Children learn how our everyday local "superheroes"—firefighters, police officers, and doctors—operated in the past compared to today.
The Knowledge: They learn that past firefighters used leather buckets, horse-drawn carriages, and hand-pumped water, whereas modern firefighters use high-tech fire engines, heat-seeking cameras, and oxygen tanks.

C. Historical Vocabulary & Chronological Frameworks
The Substantive Base: Know and correctly use common words and phrases relating to the passing of time (e.g., *before I was born, a long time ago, past, present, century*). Identify where people and events fit within a chronological timeline.

Learning Theme Application:
The Timeline of Bravery: Children learn to order their historical heroes chronologically. They discover that Grace Darling's sea rescue happened *before* Florence Nightingale went to the Crimean War, and both happened *long before* their own grandparents were born.

Why Substantive History Knowledge Matters
1. It Redefines What It Means to Be a 'Hero'
Young children's understanding of a "hero" is heavily dominated by fictional media: characters who solve problems with laser eyes, magic, or physical violence. Substantive historical knowledge provides a vital reality check. By learning about the real-world struggles of people like Harriet Tubman or Mary Seacole,

children realise that **true heroism is defined by empathy, resilience, moral courage, and helping others**—qualities they can actually practice in their own lives.

2. It Constructs a 'Mental Coat Hanger' for Time

Without concrete facts, history is just a giant, blurry soup of "the olden days." Learning specific names, events, and rough dates gives children a physical framework to hang future knowledge on. When they later study Victorian Britain or the American Civil War in Key Stage 2, they won't start from scratch; they will already have the anchor points of Florence Nightingale or Harriet Tubman to orient themselves.

3. It Introduces the Concept of Human Progress

By comparing the equipment of past emergency services to modern gear, children learn the concept of **technological progress**. They realise that the tools we rely on today to stay safe didn't just appear out of nowhere; they are the result of centuries of human trial, error, and invention. This builds an early, fundamental appreciation for scientific innovation and social change.

Disciplinary Knowledge

While substantive knowledge provides the historical facts—the names, dates, and actions of real-life heroes—**disciplinary knowledge** is the process of *doing* history. It is how children learn to think like a historian. In Key Stage 1, **disciplinary knowledge** is not about passively listening to a story; it is about teaching children how to interrogate old objects, detect clues in a photograph, spot differences across time, and understand that our knowledge of the past relies entirely on surviving evidence. Framed around the **'Superheroes'** learning theme, children transform into "History Detectives." Their mission is to investigate the evidence left behind by real-life heroes to prove their historical impact.

Core Disciplinary History Actions Applied to 'Superheroes'

Under the National Curriculum, historical disciplinary skills are split into specific concepts. Here is how they operate within the "Real-Life Superhero" framework:

A. Using Historical Evidence: Investigating the Hero's Toolkit

The Disciplinary Practice: Understanding how we find out about the past from a range of sources (artefacts, photographs, letters, diaries). Children learn that a source is a clue left behind from a specific point in time.

Learning Theme Application:

The Context: Determining how Florence Nightingale improved hospitals without using modern computers.
The Disciplinary Action: Instead of being told what she did, children examine primary sources: a replica of her oil lamp, a black-and-white sketch of a hospital ward, or an excerpt from a letter she wrote. They ask investigative questions: *"What is this lamp made of? Why didn't she just turn on a light switch? What does this picture tell us about how dirty the floors were before she arrived?"*

B. Continuity and Change: Tracking the Superhero Evolution

The Disciplinary Practice: Identifying similarities and differences between ways of life in different periods, noticing what has changed and what has stayed the same.

Learning Theme Application:

The Context: Comparing a modern paramedic to a historical nurse like Mary Seacole.
The Disciplinary Action: Children place photos of Mary Seacole's makeshift medical clinic next to a photo of a modern NHS ambulance. They actively sort attributes: *"The goal of saving lives has stayed the same (continuity), but the medicine, the speed of transport, and the uniforms have completely changed (change)."*

C. Cause and Consequence: The Ripple Effect of Bravery
The Disciplinary Practice: Exploring *why* a historical event happened and *what happened next* because of it.

Learning Theme Application:
The Context: Exploring the impact of Grace Darling's famous sea rescue in 1838.
The Disciplinary Action: Children map out cause and effect. **Cause:** A ship crashed into rocks during a fierce storm. **Action:** Grace and her father rowed a small wooden boat into the waves to rescue survivors. **Consequence:** She became a national hero, and her bravery inspired people to donate money to build better lifeboats and lighthouses, saving future lives.

Substantive vs. Disciplinary: The 'Superheroes' History Split

Substantive History Knowledge (The Facts)	Disciplinary History Knowledge (The Process)
Knowing that **Grace Darling** saved nine people from a shipwrecked steamship in 1838.	**Examining a painting of the storm** or a model of her wooden rowboat to figure out how dangerous and difficult the rescue must have been.
Knowing that **firefighters in the past** used leather buckets and horse-drawn carriages to put out fires.	**Looking at a real Victorian leather bucket** and realising it would hold less water than a modern hose, concluding that past firefighting was much slower.
Knowing that **Harriet Tubman** was a real woman who helped people escape from slavery.	**Using a timeline** to physically arrange her life events in order, proving she lived *before* our grandparents were born.

Why Disciplinary History Knowledge Matters
1. It Ignites Critical Thinking and Healthy Scepticism
Teaching disciplinary knowledge prevents children from blindly accepting everything they read or see on a screen as absolute truth. By looking at a real historical artefact—like a dented, old metal firefighter's helmet—and deduction-testing it (*"Why is it made of heavy metal instead of plastic?"*), children learn to search for evidence before drawing conclusions. This forms the absolute baseline of critical media literacy.

2. It Teaches Empathy Through Perspective-Taking
When children practice disciplinary history, they are forced to step into the shoes of someone from another era. Looking at a photograph of Victorian children working in coal mines or factories helps them realise that life in the past operated under completely different rules. It fosters profound historical empathy, helping them appreciate the comforts of the modern world while respecting the immense bravery it took to survive in the past.

3. It Reveals That History is a Constructed Puzzle
Children often think history is a pre-written, magical story book. **Disciplinary knowledge** teaches them that **history is a puzzle assembled by human hands**. They realise that if an archaeologist doesn't dig up an artefact, or if a hero didn't write a diary entry, that story could be lost forever. It frames history as an active, exciting detective hunt, showing them that their own letters, toys, and photos will one day be the

clues future historians use to decode *our* lives.

Learning Objectives

Develop an awareness of the past, using common words and phrases relating to the passing of time:
Objective: Children will use words like 'long ago', 'then', 'before', 'after', 'now', 'old', 'new' when talking about real or fictional heroes and how their stories or ideas have changed.
Superhero link: Discussing how superhero costumes have changed "then" and "now," or how stories about brave people were told "long ago" compared to "now."

Know where the people and events they study fit within a chronological framework:
Objective: Children will begin to sequence events related to a superhero's 'origin story' or a real hero's life on a simple timeline.
Superhero link: Creating a timeline of a superhero's 'birth' (first appearance), powers developing, and key battles. Or, a simple timeline of a historical figure's life, highlighting key brave acts.

Identify similarities and differences between ways of life in different periods:
Objective: Children will compare the challenges and ways of helping people from different historical periods to the challenges and methods of modern superheroes.
Superhero link: Comparing how a historical hero (e.g., Florence Nightingale) helped people in the past to how a fictional superhero helps people today (e.g., no super strength, but kindness and skill).

Understand some of the ways in which we find out about the past and identify different ways in which it is represented:
Objective: Children will explore different 'sources' (e.g., stories, pictures, toys, comics) that tell us about superheroes or historical heroes.
Superhero link: Looking at old comic books, comparing them to modern superhero films, discussing how stories are told differently (e.g., picture stories, spoken stories, movies).

Specific Objectives linked to 'Superheroes' (drawing from the above aims and National Curriculum content areas):

1. The lives of significant individuals in the past who have contributed to national and international achievements (and comparing aspects of life in different periods):
Objective: Children will learn about a real-life historical figure (a 'real-life hero') who showed bravery and helped others, comparing their actions and tools to those of a fictional superhero.
Example: Studying **Florence Nightingale** (caring for the sick in challenging conditions, making huge changes to hospitals) or **Mary Seacole** (bravery, helping soldiers, travelling to help).
Link to superheroes: Discussing what 'superpowers' Florence or Mary might have needed (e.g., resilience, kindness, leadership) and how their 'gadgets' were different (e.g., medicine, lamp vs. laser beam, flying).
Comparison: How did Florence help people compared to how Superman helps people? (Real actions vs. fictional powers). How did their lives differ from our lives today?

Objective: Children will understand that people in the past had different ways of helping others and different challenges to overcome.
Example: Exploring real-life 'rescuers' from the past (e.g., **Grace Darling** and her bravery at sea, or local historical figures who showed courage).
Link to superheroes: What tools did Grace Darling use compared to a superhero's gadgets? What dangers

did she face?

2. Changes within living memory (where appropriate, to reveal aspects of change in national life):
Objective: Children will explore how the idea of a 'hero' or 'superhero' has changed over time, within living memory.
Example: Interviewing grandparents or older family members about their childhood heroes (e.g., comic book heroes, sports heroes, people who did kind things) and comparing them to heroes of today.
Link to superheroes: Comparing early comic book superheroes (e.g., first appearance of Superman or Batman) to modern film superheroes – how have their costumes changed? Their powers? The stories?

3. Events beyond living memory that are significant nationally or globally (can be adapted to include heroic actions or figures):
Objective: Children will learn about a significant historical event where people acted heroically, even if they didn't have 'superpowers'.
Example: The **Great Fire of London** (focusing on heroic firefighters, people helping each other, or the bravery of Samuel Pepys in recording events).
Link to superheroes: What 'heroic' actions did people take during the fire? What 'problems' did they face that a superhero might solve today (e.g., putting out fire, flying people to safety)?

Developing Historical Skills through 'Superheroes':
Chronological understanding:
Objective: Use common words and phrases relating to the passing of time (e.g., 'old', 'new', 'before', 'after', 'long ago', 'now').

Objective: Sequence events in the 'origin story' of a fictional superhero or key events in the life of a real-life hero on a simple timeline.

Historical enquiry and sources:
Objective: Ask and answer questions about fictional superheroes' origins or real-life heroes' actions (e.g., "How did they get their powers?", "What brave thing did they do?", "How do we know?").

Objective: Use parts of stories, pictures, or simple 'artefacts' (e.g., old comic books, pictures of old uniforms/equipment) to show what they know about heroes past and present.
Understanding change and continuity:
Objective: Identify simple similarities and differences between heroes of the past and present (e.g., "They both wanted to help people, but they used different tools").

Historical vocabulary:
Objective: Use vocabulary related to time and historical concepts (e.g., 'past', 'present', 'brave', 'challenge', 'solution').

Lesson Ideas

This 6-week Medium-Term Plan for Key Stage 1 History utilises the **'Superheroes'** learning theme. This plan is structured around a central, inquiry-based question: **'What makes a real-life superhero?'** Over six weeks, pupils transition from examining their own lives to exploring local emergency heroes of the past, before investigating three world-changing historical figures.

Theme: Real-Life Superheroes of the Past
Duration: 6 Weeks (1 Hour per week)
Core Project: Building a "Hall of Heroes" museum exhibition using historical evidence, chronological timelines, and artefact analysis.

The 6-Week Superhero History Scheme

WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
My Own Past	Everyday Heroes	Grace Darling	Florence Nightingale	Mary Seacole	Hall of Heroes
"Timeline of Me"	"Then vs. Now Gear"	"A Sea Rescue"	"Lady with the Lamp"	"The Herbalist"	"Curating the Past"

Week 1: My History (The Concept of Time)
Substantive Knowledge (What to learn):
Know that the **past** refers to things that have already happened, and the **present** is what is happening right now.
Use time vocabulary correctly: *yesterday, last year, when I was a baby, before I was born.*
Disciplinary Knowledge (How to act like a historian):
Place three personal events from their own life in chronological order on a simple timeline.
Identify a physical change in themselves over time (e.g., comparing a baby shoe to their current shoe).
The Mission: *The Origin Story.* Just like comic superheroes have an origin story, pupils construct their own. They bring in a baby photo and compare it to a current photo, identifying physical differences. They then draw a 3-step timeline: "When I was a baby," "My first day at school," and "Me today."

Week 2: Everyday Heroes (Changes Within Living Memory)
Substantive Knowledge (What to learn):
Know that firefighters and police officers are "everyday heroes" who keep us safe today.
Know that in the Victorian past, firefighters used different tools, such as horse-drawn carriages, manual hand pumps, and leather water buckets.
Disciplinary Knowledge (How to act like a historian):
Identify similarities and differences between firefighting equipment of the past and present.
Use historical photographs to find clues about how people lived and worked in the past.
The Mission: *The Firefighting Detective.* Pupils examine historical photographs and illustrations of Victorian fire engines. They compare them directly to modern fire engines, identifying what has changed (motors vs. horses, high-pressure hoses vs. buckets) and what has stayed the same (the goal to put out fires and protect people).

Week 3: Grace Darling (The Rescue Hero)
Substantive Knowledge (What to learn):
Know that **Grace Darling** was a lighthouse keeper's daughter who lived in Northumberland in 1838.
Recall the factual events of September 7, 1838: Grace spotted a shipwrecked steamship (*SS Forfarshire*) and rowed a wooden coble boat with her father through a storm to rescue nine survivors.
Disciplinary Knowledge (How to act like a historian):
Use primary sources (paintings of the storm, photos of her actual wooden boat) to make deductions about how difficult and dangerous her rescue mission was.
Understand the concept of **cause and consequence**: Grace's brave actions (cause) led to her becoming a national hero and inspired the development of better lifeboats (consequence).

The Mission: *The Stormy Rescue.* Pupils are presented with a painting showing Grace Darling rowing in the storm. They study it closely to find clues: *How big are the waves? What is the boat made of? How would you feel if you were in that boat?* They construct a simple cause-and-effect map of the rescue.

Week 4: Florence Nightingale (The Hospital Reformer)

Substantive Knowledge (What to learn):

Know that **Florence Nightingale** lived during the Victorian era and travelled to the Crimean War in 1854 to nurse wounded soldiers.

Know that she was called "The Lady with the Lamp" because she checked on soldiers in the dark.

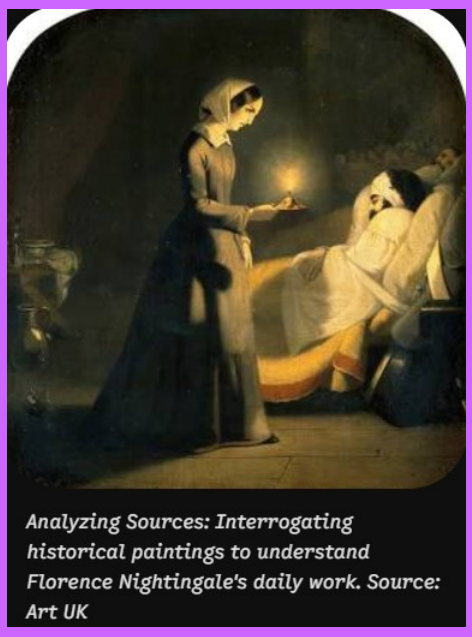
Recall three specific changes she made to hospitals: cleaning the floors, washing sheets, and serving healthy food.

Disciplinary Knowledge (How to act like a historian):

Contrast a dirty, pre-reform Victorian hospital ward with a clean, post-reform ward using historical drawings.

Understand that written letters and diaries from the past are primary sources that tell us what historical actors were thinking.

The Mission: *The Lady with the Lamp.* Pupils investigate a replica of a Victorian oil lamp and a painting of Florence carrying it. They discuss why she needed it (no electric light switches in the past). They then look at "before and after" pictures of her hospital wards, circle the changes she made, and write down how these changes saved lives.



Analyzing Sources: Interrogating historical paintings to understand Florence Nightingale's daily work. Source: Art UK

Week 5: Mary Seacole (The Crimean Herbalist)

Substantive Knowledge (What to learn):

Know that **Mary Seacole** was a Jamaican-born nurse who travelled to the Crimean War at the same time as Florence Nightingale.

Know that she was refused permission to join Florence's official nursing team, so she used her own money to travel and build the "British Hotel"—a safe clinic close to the battlefields.

Know that she used traditional Jamaican herbal remedies to treat sick soldiers.

Disciplinary Knowledge (How to act like a historian):

Compare the lives and obstacles of two different people living at the same time (Florence Nightingale vs. Mary Seacole).

Express empathy for the challenges faced by historical figures due to their background or identity.

The Mission: *The British Hotel.* Pupils explore Mary Seacole's story. They look at her portrait and images of her autobiography. They discuss the differences between Florence's clean, organised military hospital and Mary's hands-on battlefield clinic. They sort cards of Florence and Mary to show what they had in common (bravery, desire to save lives) and how they differed (their backgrounds, where they worked).

Week 6: The Hall of Heroes Exhibition (Synthesis & Curating)
Substantive Knowledge (What to learn):
Consolidate prior knowledge: recall the names, actions, and historical periods of the everyday heroes, Grace Darling, Florence Nightingale, and Mary Seacole.
Place all studied historical figures in chronological order on a master class timeline.
Disciplinary Knowledge (How to act like a geographer):
Select appropriate objects/images to represent a historical figure's life.
Explain *why* a person is considered historically significant (why they are remembered today).
The Mission: *Curators of the Past.* Pupils work in small groups to set up a "Real-Life Hero" museum exhibition table. They choose a hero and select "artefacts" to display (e.g., a toy rowboat for Grace, a replica lamp for Florence, or herbal tea leaves for Mary). They write a short museum label explaining who this person was, what they did, and why they are still remembered as a hero today.
Why This History Curriculum Matters
1. It Counters Passive Legend-Building with Real Human Struggles
At this age, children often absorb history as clean, magical folklore. Teaching disciplinary history alongside facts forces them to realise that **real life was hard**. They discover that Florence Nightingale fought against dirty, rat-infested conditions, Mary Seacole faced rejection because of her background, and Grace Darling rowed through actual, terrifying waves. This transforms historical figures from cardboard characters into deep, inspiring examples of human perseverance.

2. It Teaches the Architecture of Truth
By regularly practicing with historical evidence (photos, paintings, old objects), pupils learn that **history is not made up; it is reconstructed from what remains**. When they realise we know about Grace Darling because of her actual wooden boat, or Florence Nightingale because of her written letters, they learn to look for evidence to back up claims. This serves as their very first introduction to investigative research.

3. It Shapes Their Personal Value System
By anchoring the concept of a "superhero" in real historical actions rather than fictional powers, children's understanding of achievement is re-centred around compassion, civil service, and moral bravery. It teaches them that they do not need magic to change the world—they just need the determination to help others.

Assessment Indicators

Developing (Working Toward)	Secure (Expected Standard)	Greater Depth (Exceeding)
Struggles to place events in order on a simple timeline. Mixes up names and facts of the heroes. Cannot explain the difference between a real object and a modern replica.	**Correctly orders their own life and the studied heroes on a timeline.** States who Grace, Florence, and Mary were and what they did. **Uses historical photographs to describe differences**	Independently spots subtle clues in historical pictures. Explains why Mary Seacole faced different struggles than Florence Nightingale. Uses terms like *century* or *Victorian* accurately.

Developing (Working Toward)	Secure (Expected Standard)	Greater Depth (Exceeding)
	between past and present. Explains how a physical artefact tells us about the past.	Explains how the actions of past heroes directly changed our world today.

Other Information, Ideas and Resources

Real-Life Heroes Then and Now:
Concept: Introduce the idea that while superheroes have amazing powers, throughout history, there have been "real-life heroes" who have done incredible things through their bravery, kindness, and determination.

Activities:
Storytelling: Share simple stories of historical figures who showed courage or helped others (e.g., Florence Nightingale, firefighters from the Great Fire of London, local heroes from your community).
Comparison: Discuss what makes these figures "heroic" and compare their actions to the qualities of fictional superheroes. What skills did they use instead of superpowers?
Timeline: Create a simple timeline showing when these real-life heroes lived, emphasising that heroes exist in different times.
Role-play: Children can act out simple scenarios of real-life heroes helping others.

Superhero Uniforms Through Time (Imaginary):
Concept: Explore how clothing and uniforms have changed over time, using the imaginative lens of superhero costumes.

Activities:
Drawing and Design: Ask children to design superhero uniforms for different historical periods (e.g., a Roman superhero with a toga-inspired costume, a Victorian superhero with a cape and top hat).
Discussion: Talk about the materials and styles of clothing from those periods and how they might influence a superhero's look.
'Fashion Show': Children can present their historical superhero designs and explain their choices.

Superhero Tools and Technology (Then and Now - Simple):
Concept: Introduce the idea that tools and technology have evolved over time, even for fighting "bad guys" (in a child-friendly way).

Activities:
Matching Game: Create simple pictures of old and new tools (e.g., a quill and a pen, a horse-drawn carriage and a car) and discuss how they help people.
Imaginary Superhero Gadgets: Ask children to imagine what kind of simple tools or gadgets a superhero from a different historical period might use. A knight superhero might have a special shield, while a Victorian superhero might have a clever mechanical device.
'Inventor's Workshop': Children can draw or build (using simple materials) their own historical superhero gadgets.

Superhero Stories from the Past (Creating Fictional Narratives):

Concept: Encourage imaginative storytelling by setting superhero adventures in historical contexts.
Activities:
Story Starters: Provide simple scenarios like, "Imagine a superhero who lived in a castle..." or "What if there was a superhero during the time of the dinosaurs?"
Group Storytelling: Work together as a class to create a simple superhero story set in the past.
Drawing and Writing: Children can draw pictures and write simple sentences about their historical superheroes and their adventures.

Considerations for Implementation

Keep it Simple: Focus on basic historical concepts like "long ago," "now," and how things have changed.
Focus on People: Connect the historical context to people and their lives, even in the superhero narratives.
Use Familiar Superhero Tropes: Leverage children's existing knowledge of superheroes (powers, costumes, helping others) to make the historical connections more engaging.

Music

See also Charanga Schemes of work

Substantive Knowledge

In Key Stage 1 Music, **substantive knowledge** consists of the structural blocks of music that children can explicitly hear, name, and control. It is the vocabulary of the art form—learning the difference between a fast beat and a slow one, high notes and low notes, or loud sounds and quiet sounds. By anchoring this to the **'Superheroes'** learning theme, these abstract musical concepts (collectively known as the *interrelated dimensions of music*) become instantly recognisable. Children learn that music isn't just random noise; it is a powerful tool used to tell a story, set a mood, and bring their favourite heroic characters to life.

Core Substantive Music Knowledge: The 'Superhero' Framework
Under the National Curriculum and Model Music Curriculum for KS1, substantive knowledge is broken down into the foundational elements of music. Here is how they map to the "**Superhero**" learning theme:

A. Tempo (Fast vs. Slow)
The Substantive Base: Know that *tempo* means the speed of the music. Understand that music can speed up (*accelerando*) or slow down (*ritardando*).

Learning Theme Application:
The Flash vs. The Snail: Children learn that a rapid, driving tempo represents a speedster superhero rushing to save the day. Conversely, a slow, crawling tempo represents a villain sneaking through the shadows or a giant hero stomping heavily through a city.

B. Dynamics (Loud vs. Quiet)
The Substantive Base: Know that *dynamics* means the volume of the sound. Learn basic terms like loud (*forte*) and quiet (*piano*), and recognise gradual changes in volume (getting louder or getting quieter).

Learning Theme Application:
The Stealth Mission: Children learn that a hero sneaking into an enemy base is represented by quiet, soft dynamics (like gentle taps on a triangle). An explosive battle scene or a hero bursting through a wall is represented by sudden, loud dynamics (like a crashing cymbal or a booming drum).

C. Pitch (High vs. Low)
The Substantive Base: Know that *pitch* refers to how high or low a sound is.

Learning Theme Application:
Flight vs. Earth: Children identify that high-pitched sounds (like a glockenspiel or a flute) match characters who can fly high up in the sky or shoot lasers. Low-pitched sounds (like a bass drum or a tuned chime bar played at the lowest end) represent characters with heavy armour, immense weight, or subterranean underground bases.

D. Timbre and Instrumentation (Sound Quality)
The Substantive Base: Know that *timbre* (pronounced *tam-ber*) is the unique quality of a sound that allows us to tell different instruments apart (e.g., wood vs. metal, hitting vs. shaking).

Learning Theme Application:
The Hero's Gadgets: Children learn to identify instrument families by their sound colour to match a superhero's aesthetic. High, metallic sounds (triangles, cymbals) represent futuristic, high-tech gadgets or shiny armour. Woody, clicking sounds (claves, woodblocks) represent stealthy footsteps or martial arts blocks.

Substantive Music Knowledge Reference

Musical Element	Technical Term	Superhero Association
Speed	Tempo	**Fast:** Flying or sprinting to the rescue. **Slow:** A giant villain marching.
Volume	Dynamics	**Loud (*Forte*):** A superpower explosion or triumph. **Quiet (*Piano*):** Sneaking into a secret hideout.
Height of Sound	Pitch	**High:** Shooting lasers, soaring through the clouds. **Low:** A heavy monster stomping or rumbling earth.
Sound Quality	Timbre	**Metal:** Shiny shields, robot armour, high-tech lasers. **Skin/Drum:** Heartbeats, running footsteps, heavy punches.

Why Substantive Music Knowledge Matters
1. It Builds a Vocabulary for Emotional Expression
Young children intuitively feel the mood of music, but they often lack the words to explain *why* it makes them feel that way. Substantive knowledge gives them the toolkit to move past "the music sounds scary" to "the music sounds scary because the *pitch* is very low and the *tempo* is slow." This bridge allows them to analyse the world around them critically, from the television shows they watch to the movies they see.

2. It Teaches Intentionality in Creation
Without substantive knowledge, giving a 6-year-old a percussion instrument results in unstructured, chaotic banging. By introducing the framework of characters, children learn that every hit of a drum or shake of a maraca must be deliberate. They realise: *"I am hitting this drum loudly and fast because my superhero is chasing a villain right now."* This transforms noise-making into purposeful composition.

3. It Enhances Auditory Processing and Focus
In a world saturated with visual media, music forces children to rely entirely on their ears. Learning to track changes in pitch, tempo, and dynamics builds highly sophisticated listening skills. It trains the brain to notice subtle details, variations, and patterns in sound—a foundational cognitive skill that directly supports phonics, reading rhythm, and spoken language development.

Disciplinary Knowledge

While substantive music knowledge provides the technical building blocks (the vocabulary of tempo, dynamics, and pitch), **disciplinary knowledge** is the practice of *acting like a musician.* It is how children manipulate those sounds to create, perform, listen, and talk about music.
In Key Stage 1, children learn that music isn't just a passive soundtrack playing in the background of their lives. Under the **'Superheroes'** learning theme, they step into the roles of film composers, sound effects designers, and ensemble performers. They learn how to use instruments to construct tension, celebrate a victory, or paint a sonic picture of a hero in flight.

Core Disciplinary Music Actions Applied to 'Superheroes'
Under the National Curriculum and Model Music Curriculum, music-making is categorised into three core processes: **Performing**, **Composing & Improvising**, and **Listening & Appraising**.

A. Listening and Appraising (The Film Critic)
The Disciplinary Practice: Listening with concentration to high-quality live and recorded music, identifying its features, and reflecting on how it makes them feel.

Learning Theme Application:
The Action: Children listen to iconic superhero themes (like John Williams' *Superman* theme or Danny Elfman's *Batman* theme).
The Detective Work: Instead of just saying "I like it," they evaluate *how* the composer built the character. They observe: *"The composer used loud brass trumpets playing high notes (substantive) to show that Superman is strong, brave, and flying high in the sky (disciplinary inference)."*

B. Composing and Improvising (The Soundtrack Designer)
The Disciplinary Practice: Creating musical ideas, organising sounds, and representing those sounds using simple notation (like graphic scores).

Learning Theme Application:
The Action: Children create a "soundscape" for a superhero comic strip.
The Detective Work: They choose classroom instruments to represent a story. For instance, they might tap a wooden guiro slowly to represent a villain creeping up, followed by a loud, sudden crash on a cymbal when the hero saves the day. They then draw a **graphic score**—using wavy lines, big dots, and starbursts—to write down their music so others can play it.



Graphic Notation: How KS1 pupils learn to write down their superhero soundscapes using visual symbols rather than traditional notes. Source: Andrew Downes

C. Performing (The Hero's Orchestra)

The Disciplinary Practice: Using voices expressively and creatively by singing songs, and playing tuned and untuned instruments individually and in groups.

Learning Theme Application:

The Action: Singing a superhero theme song or playing a steady beat as an ensemble to accompany a chase scene.

The Detective Work: Children learn the physical discipline of performance. They must control their breathing, watch a conductor's hand gestures to start and stop at the same time, and maintain a steady pulse (*heartbeat*) on their drum, even when the person next to them is playing a different pattern.



Performance Discipline: Children learning to play together as a cohesive ensemble. Source: FatCamera / Getty Images

Substantive vs. Disciplinary: The 'Superheroes' Music Split

Understanding the difference between the "tools" (substantive) and the "craft" (disciplinary) is crucial for effective music lessons:

Substantive Music Knowledge (The Tools)	**Disciplinary Music Knowledge (The Craft)**
Knowing that **dynamics** means volume (loud/quiet) and **tempo** means speed (fast/slow).	**Adjusting the dynamics** on a tambourine to make a villain sound like they are sneaking closer and closer.
Knowing that a **glockenspiel** is a metallic instrument that makes a bright, ringing pitch.	**Improvising a melody** on a glockenspiel to represent a flying superhero soaring over buildings.
Recognising the difference between a **steady pulse** (like a heartbeat) and a rhythm.	**Clapping and keeping a steady, driving beat** as an entire class while singing a "Superheroes to the Rescue!" song.

Why Disciplinary Music Knowledge Matters

1. It Demystifies Creativity

Many children grow up believing that composing music is a "magic trick" reserved only for naturally gifted geniuses. Disciplinary knowledge demystifies this process. By showing children that they can take a sound (a wooden tap), assign it a meaning (a superhero's footstep), write it down as a symbol (a dot), and perform it, they realise that **music is a craft they can design and build themselves**.

2. It Cultivates Emotional Intelligence and Empathy

Music is a non-verbal language of emotion. When children listen to a piece of music and decode how a composer uses minor keys, slow tempos, and low pitches to evoke fear or sadness, they are developing emotional literacy. Applying this to the learning theme "**Superheroes**" allows them to explore complex feelings—fear, courage, triumph, and suspense—within a safe, structured, and playful environment.

3. It Teaches the Collective Power of Collaboration

In an ensemble performance, no single instrument is the "star." If the drum plays too fast, the triangles get left behind; if the cymbals crash too loudly, the glockenspiels can't be heard. Playing in a musical group teaches children **cooperation, self-regulation, and active listening**. They learn that to make beautiful music (or to save the day, just like the Avengers), they must work together as a synchronised team.

Learning Objectives

Use their voices expressively and creatively by singing songs and speaking chants and rhymes.

Objective: Children will sing songs and chant rhymes that explore different aspects of superheroes, villains, and their adventures.

Superhero link: Singing songs about super speed (fast tempo), super strength (loud dynamics), flying (smooth legato), or sneaky villains (staccato, quiet dynamics). Creating chants for superhero teams or villainous plans.

Play tuned and untuned musical instruments musically.

Objective: Children will experiment with and play a range of instruments to create sounds that represent superhero powers, actions, and emotions.

Superhero link:
Untuned percussion: Using drums for powerful superhero landings, shakers for quick flight, cymbals for dramatic impacts, woodblocks for secret messages.
Tuned percussion (e.g., glockenspiels, xylophones): Creating ascending/descending melodies for flying, short sharp notes for zapping powers, or sustained notes for a sense of awe.

Listen with concentration and understanding to a range of high-quality live and recorded music.
Objective: Children will listen to and identify how music is used to create specific effects or represent characters in a superhero context.
Superhero link: Listening to film scores (e.g., superhero movie themes) and identifying how different instruments, tempos, and dynamics are used to portray heroes, villains, danger, excitement, or victory. Discussing the 'feel' of the music (e.g., "Does this music make you feel brave or scared?").

Experiment with, create, select and combine sounds, using the inter-related dimensions of music.
Objective: Children will explore and combine different sounds to create short musical pieces, soundscapes, or accompanying music for superhero scenarios.
Superhero link:
Dynamics: Exploring loud (fortissimo) sounds for a superhero's big punch and quiet (pianissimo) sounds for a stealthy villain.
Tempo: Fast (allegro) for super speed, slow (adagio) for a superhero recovering.
Pitch: High sounds for flying, low sounds for a giant villain.
Timbre (sound quality): Choosing instruments that sound 'strong' or 'sneaky'.
Texture: Layering sounds to create a busy city scene or a chaotic battle.
Structure: Creating simple musical phrases for a superhero's entrance or exit.

Specific Objectives linked to 'Superheroes' (drawing from the above aims):
Exploring Dynamics and Tempo to represent Superhero actions and characters.
Example: Creating a piece of music using instruments that gets louder (crescendo) and faster (accelerando) to represent a superhero chasing a villain, then softer (decrescendo) and slower (ritardando) as they escape.
Example: Using loud, sustained notes for 'Super Strength' and quiet, quick notes for 'Invisible Power'.

Using voices and body percussion to tell a Superhero story.
Example: Chanting "Pow! Zap! Whizz!" with different vocal dynamics. Using claps, stomps, and clicks to create sounds for running, flying, or landing.
Creating short musical phrases or motifs for specific superheroes or villains.
Example: Designing a 'theme tune' for their invented superhero using a glockenspiel, focusing on a short, memorable melody. Creating a 'villain' sound using lower, dissonant notes.

Listening and responding to how music creates mood and atmosphere in a superhero context.
Example: Listening to two different pieces of music (one heroic, one villainous) and describing how each makes them feel and what elements contribute to that feeling.

Experimenting with different instruments to create a soundscape for a superhero scene.
Example: Using shakers for a busy city, drums for an explosion, wind chimes for a superhero flying through the air.

Composing simple rhythmic patterns to represent different superhero powers or actions.
Example: Clapping a rhythm for "Super-speed runs!" or "Villain hides!".

Lesson Ideas

This 6-week Medium-Term Plan for Key Stage 1 Music uses the **'Superheroes'** learning theme to teach children how to control, compose, and perform music. This plan is structured around a central, inquiry-based question: **'How can we use sound to tell a superhero story?'** Over six weeks, pupils will progress from identifying basic musical elements to composing and performing their own live superhero soundtrack.

Theme: Superhero Soundtracks & Sonic Powers
Duration: 6 Weeks (1 Hour per week)
Core Project: Creating, notation-mapping, and performing a live musical soundtrack to a "Superhero vs. Villain" comic strip.

The 6-Week Superhero Music Scheme

WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
The Hero Theme	Superpower Sounds	Flight & Footsteps	The Graphic Score	The Rehearsal	The Big Premiere
Appraising Tempo	Dynamics Match	Pitch & Timbre	Visual Notation	Ensemble Skills	Live Soundtrack

Week 1: Hearing the Hero (Appraisal & Tempo)
Substantive Knowledge (What to learn):
Know that a **tempo** is the speed of music (fast or slow).
Know that a **steady pulse** is like a heartbeat that stays constant.
Recognise that fast music often represents action or speed, while slow music can represent suspense, strength, or giant movements.
Disciplinary Knowledge (How to act like a musician):
Listen to orchestral music (e.g., John Williams' *Superman* theme) and describe its tempo.
Keep a steady, marching physical pulse (clapping or tapping knees) to a hero's theme song.
The Lesson Activity: *Musical Super-Speed.* Pupils listen to two contrasting themes (e.g., *The Flash* vs. *The Incredible Hulk*). They march in place to match the pulse of the music. They discuss how the faster tempo makes them feel energised, while the slow, heavy beat makes them feel heavy and powerful.

Week 2: Finding the Superpower (Dynamics & Control)
Substantive Knowledge (What to learn):
Know that **dynamics** means the volume of sound (loud vs. quiet).
Know that sudden changes in dynamics can create surprise or represent an explosion.
Disciplinary Knowledge (How to act like a musician):
Control an untuned percussion instrument (like a shaker or drum) to play deliberately quiet (*piano*) and loud (*forte*).
Follow a conductor's hand signals to gradually change dynamics from quiet to loud (crescendo).
The Lesson Activity: *Stealth vs. Smash.* Pupils use hand drums or triangles. When the teacher holds their hands close together, children tap their instruments quietly to represent a superhero creeping into a villain's secret base. When the teacher opens their arms wide, the children play a loud, single strike to represent a "superpower smash."

Week 3: Flight vs. Stomp (Pitch & Timbre)

Substantive Knowledge (What to learn):
Know that **pitch** means how high or low a sound is.
Know that **timbre** (sound quality) helps us tell instruments apart (e.g., metallic chime bars sound different from wooden woodblocks).
Disciplinary Knowledge (How to act like a musician):
Choose appropriate instruments to match physical movement (high pitches for flying; low pitches for stomping).
Play an ascending pitch pattern (going up) and a descending pitch pattern (going down) on a glockenspiel.
The Lesson Activity: *Up in the Air, Down on the Ground.* Pupils explore a basket of instruments. They select metallic glockenspiels or chime bars to represent a superhero soaring through the clouds (playing high, ascending pitches). They select heavy bass drums or low chime bars to represent a giant villain stomping through streets (playing low, descending pitches).

Week 4: The Comic Strip Score (Composition & Graphic Notation)
Substantive Knowledge (What to learn):
Know that music can be written down using pictures and symbols instead of traditional notes. This is called a **graphic score**.
Know that a symbol can represent a specific instrument, dynamic, or length of sound (e.g., a big star = a loud cymbal crash).
Disciplinary Knowledge (How to act like a musician):
Create a simple musical sequence to match a visual story.
Draw original visual symbols to represent their musical ideas so that others can read and play them.
The Lesson Activity: *Soundtrack Designers.* The class is shown a 3-panel comic strip: 1) A hero flying, 2) A villain sneaking, 3) A heroic rescue. Working in small groups, children create a graphic score for the comic. They draw wavy lines for the flight, tiny dots for the sneaking, and a massive starburst for the rescue, choosing which instruments will play each symbol.

Week 5: The Superhero Orchestra (Ensemble Practice)
Substantive Knowledge (What to learn):
Know that an **ensemble** is a group of musicians playing together.
Know that to play well in an ensemble, you must listen to others and play at the same speed.
Disciplinary Knowledge (How to act like a musician):
Perform as part of a group, keeping a steady pace.
Start and stop playing exactly when instructed by a leader or when reading their graphic score.
The Lesson Activity: *Conductor Challenge.* Groups practice performing their Week 4 graphic scores. One child takes on the role of the "Conductor Superhero," pointing to the symbols on the comic strip score to tell their group when to play, how fast to go, and when to stop. Pupils practice starting and stopping in unison.

Week 6: The Big Film Premiere (Performance & Appraising)
Substantive Knowledge (What to learn):
Recall and use key musical vocabulary: *tempo, dynamics, pitch, timbre, pulse.*
Understand that a successful musical performance requires focus, listening, and audience respect.
Disciplinary Knowledge (How to act like a musician):
Perform a rehearsed piece of music live to an audience (their classmates).
Watch other groups perform and offer positive, constructive feedback using musical words (*"I liked how they used quiet dynamics for the sneaking panel"*).
The Lesson Activity: *The Live Comic Concert.* The classroom transforms into a cinema. Each group performs their live superhero soundscape while their comic strip panels are projected on the screen. The

audience listens attentively, and after each performance, they appraise the piece, identifying which musical elements were used to bring the superhero to life.

Why This Music Curriculum Matters

1. It Transitions Noise into Expression

Without a structured framework, giving percussion instruments to Key Stage 1 children often results in chaotic, competitive volume. By framing the lessons around the narrative goals of a "Superhero," children learn **sound control**. They understand that a quiet sound is just as powerful and important as a loud one because it tells a vital part of the story.

2. It Empowers Early Composers

Traditional musical notation can be a massive barrier to entry for young children. By using **graphic scores**, children immediately experience the joy of writing and reading music. It teaches them that their creative ideas are valuable, can be recorded, and can be interpreted by other musicians.

3. It Develops Essential Executive Function

Playing in an ensemble is a workout for a child's brain. It requires **inhibitory control** (resisting the urge to play when it's not your turn), **working memory** (remembering which instrument represents which character), and **cognitive flexibility** (adjusting your speed to match your peers). These musical habits build deep pathways for focus and cooperation that transfer directly to classroom learning.

Assessment Indicators

Developing (Working Toward)	Secure (Expected Standard)	Greater Depth (Exceeding)
Can make loud and quiet sounds but struggles to control them on cue. Find it difficult to keep a steady pulse. Struggles to link an instrument's sound to a character.	**Can deliberately play fast/slow and loud/quiet.** Keeps a steady pulse alongside a song. **Selects appropriate instruments to represent a hero flying vs. stomping.** Can read and play a simple graphic score.	Controls dynamics and pitch with high accuracy. Suggests original ways to represent characters Leads a group as a conductor. Uses musical vocabulary independently to evaluate why a performance worked.

Other Information, Ideas and Resources

Exploring Sounds and Instruments:

Superhero Sound Effects: Encourage the children to create sound effects for different superhero actions using their voices and classroom instruments.

Flying: Whooshing sounds, high-pitched glides on glockenspiels or xylophones.
Super Strength: Low, booming sounds made by drums or shakers.
Speed: Fast, scurrying sounds with rhythm sticks or tambourines.
Laser Beams: High, zapping sounds with triangles or finger cymbals.
Landing: A strong, grounded sound on a drum or the floor.

Instrument Heroes: Assign different instruments to represent different superheroes or their powers. For example:
A trumpet could be the heroic leader.
A shaker could represent a speedy sidekick.

A triangle could be a character with a "sparkly" power.
Let the children create short musical phrases on their assigned instruments to introduce their superhero.

Singing and Action Songs:
'Superhero, Superhero' Song: A simple call-and-response song where the teacher sings "Superhero, superhero, can you...?" and the children respond with an action and sound effect (e.g., "...fly so high? Whoosh!").

'My Special Power' Song: A song where each child thinks of their own "superpower" (it can be anything imaginative!) and sings a short phrase about it, perhaps with a simple melody. They can then create a movement to go with their power.

Action Hero Moves: Create a song with simple verses describing superhero actions (flying, running, jumping, saving the day) and a catchy chorus. Incorporate actions for the children to perform as they sing.

Rhythm and Pulse:
Superhero March: Explore a steady beat by marching like superheroes. Use drums or clapping to keep the pulse. Vary the tempo – slow for a stealthy hero, fast for a super-speedster!

Rhythm Syllables: Use superhero names or phrases (e.g., "Super-girl," "Saving the day") to explore different rhythmic patterns. Clap or tap the rhythms together.

Body Percussion Powers: Create a sequence of body percussion sounds (clapping, tapping knees, stamping feet) to represent a superhero's journey or a fight scene.

Listening and Appraising:
Superhero Theme Tunes: Listen to short excerpts of famous superhero theme music (from movies or cartoons). Discuss the mood and how the music makes them feel. What instruments can they hear? How does the music represent the superhero's character?

Creating a Class Superhero Theme: As a class, decide on the qualities of your own class superhero. Then, using the instruments available, try to create a short musical theme that reflects those qualities.

Creative Activities:
Superhero Story with Music: Tell a simple superhero story and have the children add sound effects and instrumental interludes at appropriate moments.

Designing a Superhero Instrument: Encourage the children to design and draw their own "superhero instrument" and explain what sounds it would make and what power it would represent.

Considerations for Implementation

Physical Education
Substantive Knowledge
In PE, **substantive knowledge** is the *declarative* base of movement. It is not just doing an action, but

knowing **what** the action is, **how** to do it correctly, and **why** it is done. It includes knowing the rules of a game, how to stay safe, what a specific skill looks like, and how the body reacts to exercise. By anchoring this to the **'Superheroes'** learning theme, abstract movement concepts become instantly engaging. Children don't just practice agility; they "dodge laser beams." They don't just learn a landing technique; they learn how to execute a safe "superhero landing" that protects their knees and joints.

Core Substantive PE Knowledge: The 'Superhero' Framework
Under the National Curriculum for Key Stage 1 PE, substantive knowledge centres on **Fundamental Movement Skills (FMS)**. Here is how they map directly to the "Superheroes" learning theme:

A. Locomotor Skills: Movement & Navigation
The Substantive Base: Knowing the technical difference between locomotor movements (e.g., *running* involves a flight phase with both feet off the ground; *walking* always has one foot on the ground; *hopping* is taking off and landing on the same foot; *jumping* is taking off from two feet and landing on two).
Learning Theme Application (Super-Speed & Flight):
Children learn that to run fast like a speedster, they must pump their arms and lift their knees high.
They learn that to transition from a "flight" leap over an obstacle (a toxic puddle) back to a run, they must maintain forward momentum.

B. Stability & Balance: The Heroic Pose
The Substantive Base: Knowing that a stable balance requires a **low centre of gravity** and a **wide base of support** (e.g., feet spread apart, knees slightly bent).

Learning Theme Application (The Vigilante Stance):
Children learn how to hold a "Superhero Balance" (like standing on one leg while soaring or crouching on a beam). They learn the rules of stability: to keep from falling over, they must look at a still spot on the wall, extend their arms like stabilisers, and tighten their core muscles (*"activate their super-suit"*).



Stability & Balance: Children learning how to extend their limbs while maintaining a solid, still base of support. Source: KatarzynaBialasiewicz / Getty Images

C. Safe Landing Techniques: Defying Gravity
The Substantive Base: Knowing how to absorb impact safely when landing from a jump. The physical formula for a safe landing is: land on the balls of the feet, bend the knees to a 90-degree angle, keep the back

relatively straight, and hold arms out for balance.

Learning Theme Application (The Superhero Landing):
When jumping off a low bench or "rooftop," children learn that they cannot land with straight legs. They learn that a proper "superhero landing" is soft and quiet ("landing like a cat"). Bending their knees absorbs the shock, keeping their ankles and knees safe from injury.



Safe Landing: Executing a low-crouch landing to absorb impact and protect joints.
Source: Today's Parent

D. Spatial Awareness & Safety: The Shield Bubble
The Substantive Base: Knowing the difference between **personal space** (the immediate area around your body) and **general space** (the collective area everyone shares).

Learning Theme Application (The Forcefield):
Children learn that every superhero has an invisible "forcefield" or "shield bubble." To keep their shield active and avoid collisions, they must run in the general space *without* letting their bubble touch anyone else's bubble.

Substantive PE Knowledge Reference

PE Concept	Technical Knowledge (The 'What')	Superhero Context
Balance	Low centre of gravity, wide base, eyes focused on a still point.	**The Vigilante Stance:** Standing on a high ledge or narrow beam.
Landing	Bend knees to 90°, land on balls of feet, absorb impact quietly.	**The Superhero Landing:** Jumping safely off a "rooftop" (bench).
Throwing	Step with opposite foot, point at target, release at shoulder height.	**Shield Throwing / Web Slinging:** Aiming a beanbag at a target.

Dodging	Bend knees, drop hips, push off outer foot to change direction.	**Evading Villains:** Navigating through an obstacle course.
Physiology	Exercise makes the heart beat faster to pump oxygen to muscles.	**Super-Suit Charging:** Warming up makes our "engines" warm.

Why Substantive PE Knowledge Matters

1. It Builds 'Physical Literacy' and Body Intelligence

Substantive knowledge ensures children aren't just moving randomly; they are learning *how* their bodies function. Knowing *why* they must bend their knees when they land, or *why* their heart rate increases during a game of tag, builds a foundation of body intelligence. This cognitive understanding of movement makes children more confident, competent, and willing to participate in physical activities as they grow.

2. It Prevents Injury and Ensures Safety

In a crowded school hall, 30 energetic children moving at high speeds can easily lead to accidents. When children acquire the substantive knowledge of **spatial awareness** (knowing how to locate empty spaces) and **landing mechanics** (knowing how to protect their joints), PE becomes a dramatically safer environment. They learn to self-regulate and move with intent rather than chaos.

3. It Demystifies Athletic Skill

Many young children decide early on that they are "not good at sports" because they struggle with a task like catching or balancing. Substantive knowledge breaks these physical actions down into simple, teachable recipes. By explaining that a balance is easier when you widen your feet and look at a still point, we show children that physical skill is not a genetic gift—it is a set of techniques that anyone can learn, practice, and master.

Disciplinary Knowledge

While substantive PE knowledge teaches children the physical rules of movement (e.g., *how* to balance or *why* we land with bent knees), **disciplinary knowledge** is the actual practice of *thinking and acting like an athlete or physical performer.* It is the process of applying, evaluating, adapting, and collaborating through physical movement. In Key Stage 1, disciplinary knowledge is how children transition from simply performing a movement to **solving physical problems, working as a team, and evaluating their own performance**. Under the **'Superheroes'** learning theme, children don't just do exercises; they learn how to tactically navigate a space, cooperate to solve "missions," and adapt their movements to overcome obstacles.

Core Disciplinary PE Actions Applied to 'Superheroes'

Under the National Curriculum, physical development at Key Stage 1 involves three major disciplinary domains: **Cognitive Decision Making (Tactics)**, **Social & Collaborative Play**, and **Self-Evaluation (Appraisal)**.

A. Tactical & Cognitive Decision Making (The Strategic Hero)

The Disciplinary Practice: Selecting and applying the best movement strategies to solve a problem or win a game. This involves observing an environment, spotting gaps, and deciding *when* to accelerate or change direction.

Learning Theme Application:

The Action: Playing a game of "Laser Tag" (evasion/chase games).

The Decision: Instead of running blindly, children must make tactical decisions: *"The villain is guarding the left path. I need to fake a movement to the left, drop my hips (substantive dodging technique), and burst into the open space on the right to retrieve the power crystal."*

B. Social, Collaborative & Ethical Play (The Superhero Team-Up)
The Disciplinary Practice: Working cooperatively with others to achieve a shared physical goal, understanding the concepts of fair play, and taking on simple team roles.

Learning Theme Application:
The Action: A collaborative "Rescue Mission" relay where children must transport a "wounded civilian" (a heavy medicine ball or hoop) across a toxic swamp using benches and mats.
The Decision: Children realise they cannot complete the mission alone. They must communicate, synchronise their movements, support each other's physical safety, and celebrate their teammates' successes: *"If you hold the bench steady, I can jump across safely."*

C. Self-Evaluation and Refinement (Upgrading the Super-Suit)
The Disciplinary Practice: Observing their own or a peer's performance, identifying what went well, and describing how to improve a physical skill.

Learning Theme Application:
The Action: Landing from a jump or holding a heroic balance.
The Decision: Rather than just finishing an exercise and walking away, children analyse the movement: *"My balance was a bit wobbly because my feet were too close together. Next time, I am going to widen my stance to give myself a better base of support."*

Substantive vs. Disciplinary: The 'Superheroes' PE Split
The distinction between learning a skill (substantive) and applying/evaluating it (disciplinary) in PE is the difference between preparation and action:

Substantive PE Knowledge (The Movement Tools)	**Disciplinary PE Knowledge (The Athletic Mindset)**
Knowing that a **safe landing** requires bending knees to a 90-degree angle to absorb shock.	**Evaluating a classmate's jump** and giving feedback: *"Your landing was very quiet because you bent your knees beautifully, just like a cat."*
Knowing how to **throw a beanbag** using an underarm throwing technique.	**Deciding whether to throw** a beanbag to a teammate or run with it based on where the "villain" is standing.
Knowing that running in **open space** prevents collisions with other runners.	**Actively scanning the field** during a tag game and choosing to run into a gap where no defenders are positioned.

Why Disciplinary PE Knowledge Matters
1. It Builds Resilience and a 'Growth Mindset'
Physical education can be intimidating for children who struggle with coordination. Disciplinary knowledge shifts the focus from raw athletic talent to **problem-solving and effort**. When a child realises that physical

success comes from analysing their mistakes, adjusting their strategy, and trying again, they build resilience. They learn that "failing" a jump is just a data point to help them "upgrade" their technique for the next attempt.

2. It Teaches Social Intelligence and Cooperation
In the classroom, children are often assessed individually. In PE, particularly in team-based superhero missions, success is entirely dependent on **collaboration**. Children learn how to listen to others, share equipment, take turns, and manage the frustration of a teammate making a mistake. These cooperative habits are directly transferable to the playground and the classroom.

3. It Prepares Children for Lifetime Physical Literacy
If children only learn rote physical drills, they struggle to adapt to new sports or activities as they get older. Disciplinary knowledge teaches them **the underlying concepts of play**—such as space, tactics, pacing, and teamwork. This cognitive foundation allows them to pick up any sport or physical hobby later in life with confidence, because they already understand how to think like an athlete.

Learning Objectives

Core Aims of the National Curriculum for PE (as they relate to 'Superheroes'):

Develop competence to excel in a broad range of physical activities.
Objective: Children will master basic movements and apply them in a range of activities inspired by superhero actions.
Superhero Link: Practicing 'flying' (running, gliding, leaping), 'super strength' (pushing, pulling, lifting imaginary objects), 'agility' (dodging, weaving), and 'precision' (throwing, catching).

Are physically active for sustained periods of time.
Objective: Children will participate in superhero-themed activities for a sustained duration, promoting stamina and fitness.
Superhero Link: Engaging in a "superhero training circuit," completing a "villain chase," or enduring a "mission obstacle course" for a set period.

Engage in competitive sports and activities.
Objective: Children will participate in simple competitive games, understanding basic rules and fair play, often with a superhero twist.
Superhero Link: "Superhero Tag" (trying to catch the 'villain' or 'rescue' a 'citizen'), 'Superhero Relay Races' (working as a team), or 'Target Practice' (aiming at a 'villain' target).

Lead healthy, active lives.
Objective: Children will begin to understand the importance of being active and how it makes their bodies strong and healthy, like a superhero.
Superhero Link: Discussing how superheroes need strong muscles and good stamina, making links between exercise and 'super powers' of the body.

Specific PE Objectives linked to 'Superheroes':
1. Master Basic Movements:
Running:
Objective: Use running in isolation and in combination with other movements, varying speed and direction.
Superhero Link: "Super Speed Sprints" (fast running), "Stealthy Stalking" (slow, quiet running/crawling), "Villain Chase" (changing direction to pursue/evade).

Jumping:
Objective: Perform different types of jumps (e.g., two feet to two feet, two feet to one foot, over obstacles).
Superhero Link: "Leaping Tall Buildings" (jumping over small hurdles), "Power Jumps" (jumping for height/distance), "Landing Safely" (controlled landing).

Throwing:
Objective: Throw accurately and with control, using different throwing actions (e.g., underarm, overarm).
Superhero Link: "Web-Slinging" (underarm throw with beanbags), "Laser Beam Blasts" (overarm throwing at targets), "Shield Throw" (rolling a frisbee or hoop).

Catching:
Objective: Catch a ball/object with two hands, and begin to catch with one hand.
Superhero Link: "Catch the Falling Citizen" (catching soft balls), "Intercept the Villain's Message" (catching beanbags thrown by a partner).

2. Develop Balance, Agility, and Co-ordination:
Balance:
Objective: Maintain balance in static and dynamic situations.
Superhero Link: "Tightrope Walking" (walking along a line on the floor), "Superhero Statues" (holding challenging poses), "Flying Practice" (balancing on one leg).

Agility:
Objective: Change direction and speed quickly and efficiently.
Superhero Link: "Dodge the Lasers" (dodging cones/markers), "Speed Agility Drills" (quickly moving between points), "Evading the Villain."

Co-ordination:
Objective: Combine movements smoothly (e.g., running and jumping, throwing and catching).
Superhero Link: "Superhero Obstacle Course" (combining crawling, jumping, balancing), "Patrol Route" (moving through various stations that require different skills).

3. Participate in Team Games and Develop Simple Tactics:
Teamwork/Co-operation:
Objective: Work cooperatively with others in partner and small group activities.
Superhero Link: "Rescue Missions" (working together to 'rescue' objects or 'citizens'), "Superhero Squad Challenges" (team-based problem-solving movement tasks).

Simple Tactics (Attacking & Defending):
Objective: Begin to understand basic principles of attacking and defending in simple games.
Superhero Link: In "Superhero Tag," children learn to evade (defend) and chase (attack). In simple throwing games, they might learn to move to an open space (attack) or cover a target (defend).

4. Perform Dances Using Simple Movement Patterns:
Dance & Expressive Movement:
Objective: Create and perform simple movement patterns and sequences, responding to music or a theme.
Superhero Link: "Superhero Warm-up Dance" (creating movements for different powers), "Superhero Battle Dance" (performing a sequence of moves to defeat an imaginary villain), "Victory Dance."

Example Activities and Scenarios:
Superhero Training Academy: Set up stations for different "powers" – e.g., "Super Speed Course" (running sprints), "Strength Challenge" (pushing/pulling heavy objects like benches), "Flight School" (jumping for height or distance), "Target Practice" (throwing beanbags at villain targets).
The Great City Rescue: Design an obstacle course where children have to run, jump over "rivers," crawl under "buildings," balance on "rooftops," and then "rescue" a "citizen" (e.g., a teddy bear) by carrying or pushing it to safety.
Villain Vs. Heroes Tag: A game where one or two children are the 'villains' trying to tag the 'superheroes.' Tagged superheroes might have to do a specific exercise (e.g., 5 star jumps) to regain their powers.
Power-Up Circuit: Children rotate through various exercises, each representing a different superpower (e.g., star jumps for "Super Jump," high knees for "Super Speed," press-ups for "Super Strength").

Lesson Ideas

This 6-week Medium-Term Plan for Key Stage 1 PE uses the **'Superheroes'** learning theme to develop **Fundamental Movement Skills (FMS)**. The central, inquiry-based question for this unit is: **'How does a superhero train their body to navigate obstacles, stay safe, and work as a team?'** Over six weeks, pupils progress from basic body control to designing and completing a collaborative "Superhero Rescue Mission."

Theme: Superhero Academy: Physical & Tactical Training
Duration: 6 Weeks (1 Hour per week)
Core Project: Navigating and evaluating performance in a collaborative "Superhero Rescue Obstacle Course."

The 6-Week Superhero PE Scheme

WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
Speed & Agility	Rooftop Jumps	Vigilante Balance	Shield Throwing	The Mission	Graduation & Review
Locomotor/Evasion	Safe Landing FMS	Base of Support	Target & Accuracy	Collaborative Run	Peer Appraisal

Week 1: Speed, Agility & The Forcefield (Locomotor Skills)
Substantive Knowledge (The 'What' and 'How'):
Know that *running* involves pumping arms and high knees, while *dodging* requires lowering the hips and pushing off the outside of the foot.
Know the difference between *personal space* (the "forcefield" around your body) and *general space* (the shared hall).
Disciplinary Knowledge (The Athletic Mindset):
Tactics: Scan the hall to find open spaces and actively avoid "villains" (taggers) by changing direction quickly.
Evaluation: Identify how running fast changes the body (e.g., faster heartbeat, warmer skin).
Lesson Activity: *Laser Tag & Evading Villains.* Pupils play a tag game where "villains" try to tag them with soft pool noodles ("lasers"). Pupils must stay inside their "forcefield" (personal space) and practice changing speed and direction to escape.

Week 2: Defying Gravity (Jumping & Safe Landings)
Substantive Knowledge (The 'What' and 'How'):
Know the formula for a safe landing: bend knees to a 90° angle, land on the balls of the feet, keep the back

straight, and hold arms out.
Know that landing softly and quietly protects the ankles and knees from shock.
Disciplinary Knowledge (The Athletic Mindset):
Evaluation: Watch a partner land from a jump and use feedback words (*"That was a quiet, bent-knee superhero landing"*).
Application: Adjust jumping power depending on the distance of the target.
Lesson Activity: *Rooftop Leaps.* Pupils practice jumping from low benches or floor spots ("rooftops") onto safety mats. The goal is to perform a silent "superhero landing" without losing balance or falling forward.

Week 3: The Vigilante Stance (Stability & Balance)
Substantive Knowledge (The 'What' and 'How'):
Know that a stable balance requires a **wide base of support** (feet spread) and a **low centre of gravity** (bending knees).
Know that looking at a still point on the wall helps the brain maintain balance.
Disciplinary Knowledge (The Athletic Mindset):
Problem-Solving: Find ways to balance on different numbers of "points" (e.g., 3-point balance using two feet and one hand).
Adaptability: Maintain a balance on uneven or narrow surfaces (like a gymnastics bench).
Lesson Activity: *Laser Grid Navigation.* Pupils traverse a series of narrow floor lines and low benches ("laser grids"). On the teacher's command ("Freeze!"), they must instantly lock into a stable, one-legged or low-crouch "Superhero Pose" and hold it perfectly still for 5 seconds.

Week 4: Aiming the Super-Shield (Targeting & Manipulation)
Substantive Knowledge (The 'What' and 'How'):
Know the mechanics of an underarm throw: step forward with the opposite foot, point at the target, and release the object at shoulder height.
Know that looking directly at the target increases throwing accuracy.
Disciplinary Knowledge (The Athletic Mindset):
Tactics: Adjust the force of a throw based on how far away the target is.
Ethics: Practice honest scoring and celebrate classmates when they hit a difficult target.
Lesson Activity: *Defeating the Target Drones.* Pupils use beanbags ("shields" or "web-shooters") to target cones, hoops, and soft targets set up at varying distances across the room. They must adjust their body positioning and throwing strength to hit different "villain drones."

Week 5: The Ultimate Team-Up (Collaboration & Mission Design)
Substantive Knowledge (The 'What' and 'How'):
Recall and combine all previous movement skills: *running, dodging, jumping, landing, balancing, and throwing.*
Know how to handle and carry physical objects safely while moving.
Disciplinary Knowledge (The Athletic Mindset):
Cooperation: Work in a small team to transport a "power core" (a heavy ball) across an obstacle course without dropping it.
Communication: Use clear verbal instructions to guide a teammate through an obstacle.
Lesson Activity: *The Rescue Mission.* In groups of four, pupils are given a mission: cross the toxic swamp (benches), jump off the high ledge (mats), dodge the lasers (cones), and throw the shield to power down the villain's reactor. They must complete this while working as a team and supporting one another.

Week 6: Academy Graduation (Appraisal & Performance)
Substantive Knowledge (The 'What' and 'How'):
Recall key physical concepts: *base of support, landing mechanics, personal space.*
Understand that a successful physical performance requires focus, safety rules, and teamwork.
Disciplinary Knowledge (The Athletic Mindset):
Appraisal: Observe another team completing the "Rescue Mission" obstacle course and offer structured, positive feedback.
Self-Regulation: Demonstrate sportsmanship by congratulating peers and reflecting on their own physical progress over the 6 weeks.
Lesson Activity: *The Great Showcase.* Teams take turns running their custom-designed "Superhero Mission." The resting teams act as the "Appraisal Panel," evaluating the runners using a simple feedback checklist focusing on safe landings and cooperative teamwork.

Why This PE Curriculum Matters
1. It Replaces Chaos with Body Control
Young children naturally love to run and jump, but they often do so with poor spatial awareness and dangerous landing habits. By gamifying these movements through the "Superhero" lens, we teach children **intentional mechanics**. They learn that a "cool" superhero landing is a quiet, controlled landing that protects their joints, turning chaotic playground energy into coordinated athletic skill.

2. It Makes Tactics and Strategy Accessible
PE at Key Stage 1 can sometimes devolve into simple participation without cognitive engagement. Introducing tactical disciplinary concepts—like scanning for open space, cutting off paths, or adapting throwing power—teaches children **to think while they move**. This develops cognitive processing speed and spatial intelligence.

3. It Teaches True Collaborative Success
By focusing heavily on team-based missions in Weeks 5 and 6, children learn that being "the fastest" is meaningless if you leave your team behind. They practice the crucial social-emotional skills of encouraging struggling peers, sharing equipment, and aligning their movements with others to achieve a collective victory.

Assessment Indicators

Developing (Working Toward)	Secure (Expected Standard)	Greater Depth (Exceeding)
Runs and jumps with limited spatial awareness (frequent collisions). Lands heavily with flat feet or locked knees. Struggles to hold a balance for more than 2 seconds Throws without aiming.	**Runs, twists, and dodges safely within personal space.** **Lands quietly on the balls of their feet with bent knees.** **Balances stably for 5 seconds using a wide base.** **Throws accurately underarm.**	Navigates complex obstacle paths with fluid speed. Instantly corrects their balance if disturbed. Offers clear, constructive feedback to peers using anatomical words. Demonstrates outstanding teamwork and leadership.

Other Information, Ideas and Resources

Developing Movement Skills with a Superhero Twist:

Superhero Running Styles:
Super Speed: Practice running with high knees, like they're zooming to save the day!
Stealthy Steps: Encourage quiet, light steps, like a superhero sneaking past villains.
Giant Strides: Big, powerful steps, pretending to leap over tall buildings.
Backward Flight: Careful backward jogging, imagining they're flying in reverse.

Superhero Leaping and Jumping:
Building Jumps: Set up soft blocks or hoops and have children leap over them, pretending they're clearing obstacles.
Long Jumps: Mark a starting line and see who can make the longest "superhero leap."
Power Jumps: Practice jumping as high as they can, reaching for imaginary objects in the sky.

Superhero Throwing and Catching:
Web Shooter Practice: Use beanbags or soft balls and have children practice throwing them at targets (e.g., hoops, cones), imagining they're shooting webs.

Super Catch: Practice catching soft balls of different sizes, emphasising using two hands and soft hands.
Villain Knockdown: Set up empty plastic bottles or cones and have children throw soft balls to "knock down" the villains.

Superhero Balancing:
Tightrope Walking: Use a line on the floor or a low balance beam and have children walk along it carefully, pretending they're balancing on a skyscraper.

Superhero Stances: Practice holding different balanced poses, like a powerful standing stance or a one-legged "flying" pose.
Games and Activities:
Superhero Tag: One or two children are "villains" and try to tag the other "superheroes." When tagged, a superhero has to freeze in a superhero pose until another superhero "untags" them with a special touch (e.g., a high-five).

Obstacle Course of Heroes: Set up a simple obstacle course incorporating different movements like crawling under a net (laser beams!), stepping over objects (fallen debris!), and throwing beanbags into a hoop (capturing villains!).

Superhero Training Academy: Divide the class into small groups and have them rotate through different "training stations" focusing on different skills (e.g., a throwing station, a jumping station, a balancing station).

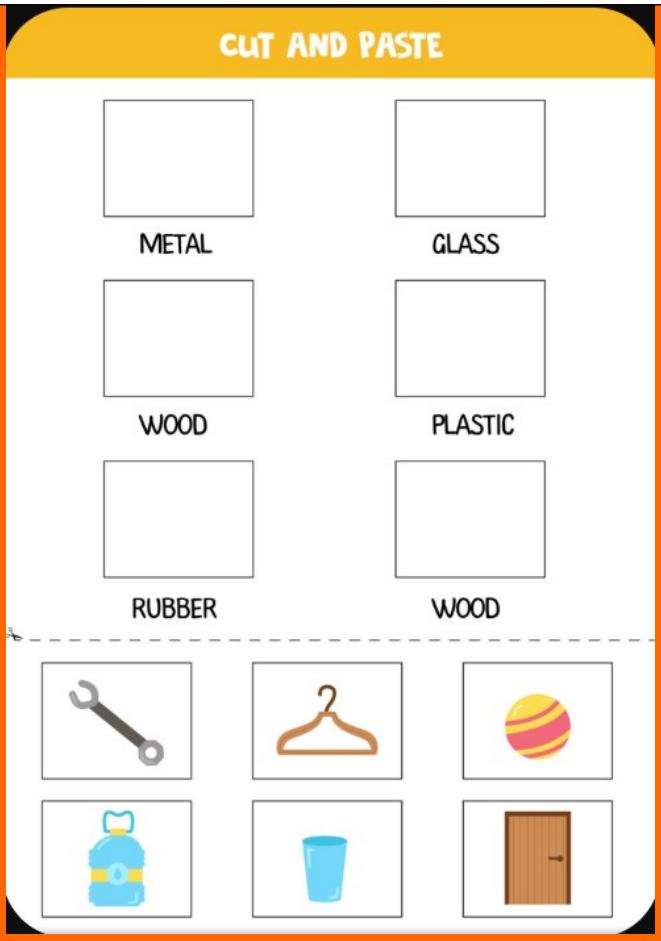
Rescue Mission: Set up a scenario where some "citizens" (cones or soft toys) are in danger. The superheroes have to work together to move them to a safe zone using different methods like carrying, rolling, or pushing.

Freeze Dance Heroes: Play music and have the children move around like superheroes. When the music stops, they freeze in a dynamic superhero pose.

Mirror Image Heroes: Children work in pairs. One child makes superhero movements, and the other mirrors their actions. They can take turns being the leader.

Considerations for Implementation

Science
Substantive Knowledge
In Key Stage 1 Science, **substantive knowledge** consists of the core scientific facts, definitions, and concepts that children need to learn. It is the established factual foundation—the "what" of science—covering topics like the names of everyday materials, the parts of the human body, and the groups of different animals. When wrapped in a **'Superheroes'** learning theme, these core curriculum facts come alive. Instead of memorising a dry list of materials, children become tech inventors selecting the right fabrics for a superhero cape. Instead of standard anatomy drills, they examine the biological "machinery" behind their favourite hero's physical powers. **Core Substantive Science Knowledge: The 'Superhero' Framework** Under the National Curriculum for Key Stage 1, substantive science knowledge drops naturally into three superhero-themed investigation categories: **A. Everyday Materials: The Super-Suit Lab** **The Substantive Base:** Knowing the names of common materials (wood, plastic, glass, metal, water, rock, fabric, paper) and distinguishing between an object and the material it is made from. Knowing the descriptive words for their physical properties (e.g., *hard/soft, stretchy/stiff, rough/smooth, waterproof/absorbent, transparent/opaque*). **Learning Theme Application:** Children learn that a superhero's gear requires specific properties. A shield needs to be made of *metal* or *hard plastic* because it is rigid and strong. A hero's cape shouldn't be made of paper because it tears easily and isn't waterproof.

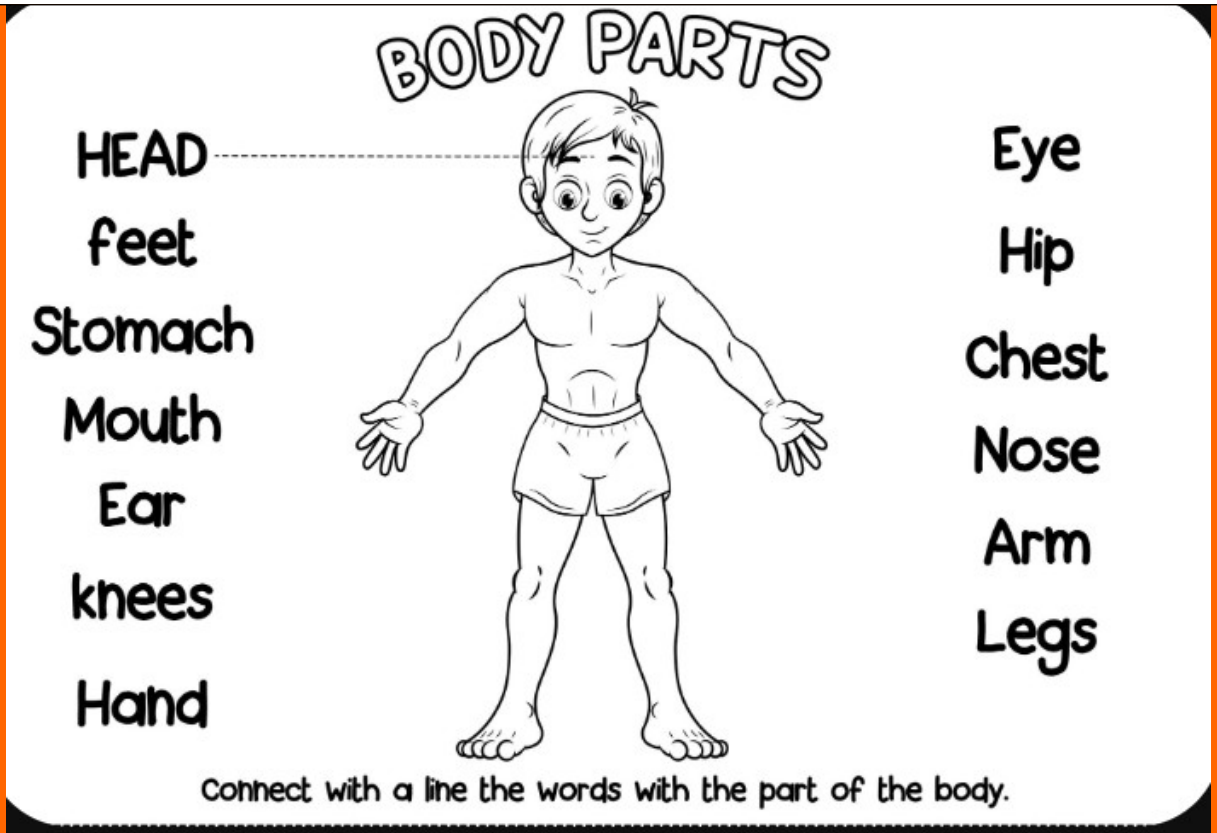


B. Animals Including Humans: The Anatomy of a Hero

The Substantive Base: Identifying, naming, and labelling the basic external parts of the human body (head, neck, arms, elbows, legs, knees, ankles, face, eyes, ears, nose). Knowing that humans have five senses (sight, hearing, touch, taste, smell) and linking each sense to a specific body part.

Learning Theme Application:

Children learn the bodily structures that allow heroes to function. They explore "super senses" (e.g., how an owl-themed hero might have heightened night *sight* using their eyes, or how a canine hero uses their nose for an advanced sense of *smell*).



Human Anatomy: Identifying the physical structures that allow humans (and superheroes) to interact with their environment. Source: Gabriel Callau / Getty Images

C. Seasonal Changes & Habitats: The Weather Watch
The Substantive Base: Knowing the four seasons (spring, summer, autumn, winter) and describing the changing weather patterns and day lengths associated with them.

Learning Theme Application:
Children investigate how weather affects a hero's daily operations. They learn that a hero rescue mission in the *winter* requires warm, insulated uniform layers because daylight hours are shorter and temperatures drop, compared to the long, hot days of *summer.*

Substantive Science Knowledge Reference

Science Concept	Key National Curriculum Fact (The 'What')	Superhero Context
Material Properties	Materials can be classified as waterproof, absorbent, flexible, or rigid.	**Designing a Cape:** Testing fabrics to see which keeps a hero dry.
Human Anatomy	The human body is supported by specific external parts and structures.	**Super Powers:** Mapping where a hero's gadgets attach to limbs/joints.
The Senses	Eyes detect sight, ears detect sound,	**Super Senses:** Investigating how

	skin detects touch and texture.	heroes gather clues from danger.
Animal Groups	Animals are categorised into birds, fish, amphibians, reptiles, and mammals.	**Sidekicks:** Grouping a superhero's animal helpers by their traits.

Why Substantive Science Knowledge Matters

1. It Builds an Accurate Technical Vocabulary

Young children often use vague descriptions like "stuff" or "bouncy thing." Substantive science knowledge equips them with precise, accurate words (*flexible, transparent, mammal, absorbent*). Having this technical vocabulary allows children to explain their observations accurately, laying the groundwork for clear communication in all future academic subjects.

2. It Combats Early Scientific Misconceptions

Children naturally build assumptions about how the world works, and some of those ideas are incorrect (e.g., thinking an object *is* wood rather than *made of* wood, or believing the sun goes to sleep in winter). Teaching concrete substantive facts directly corrects these errors early on, ensuring their future learning is built on a solid foundation of real scientific truth.

3. It Powers Analytical Thinking

You cannot solve a problem without facts. When children learn the actual properties of materials, they stop guessing randomly. If tasked with building a boat for a superhero, they don't pick tissue paper because it looks bright; they use their substantive knowledge to choose plastic or foil because they know those materials are *waterproof* and will keep the vessel afloat. It turns imagination into structural problem-solving.

Disciplinary Knowledge

In Key Stage 1 Science, **disciplinary knowledge** is the practice of **Working Scientifically**. If substantive knowledge is the *facts* of science (e.g., "metal is waterproof"), disciplinary knowledge is the *process* of being a scientist—how we find things out, test ideas, collect data, and prove our theories. When combined with a **'Superheroes'** learning theme, working scientifically transforms from a set of abstract steps into an active detective mission. Children don't just passively observe; they become **super-scientists** running laboratory tests to solve mysteries, test gadget designs, and gather clues to defeat the "villain."

1. Core Disciplinary Science Knowledge: The 'Superhero' Framework

Under the National Curriculum, Key Stage 1 disciplinary knowledge is broken down into five core scientific inquiry skills. Here is how they apply to the superhero theme:

A. Asking Questions and Speculating (The Gadget Lab)

The Disciplinary Skill: Learning how to ask questions that can actually be tested in a classroom, rather than just asking wild, untestable questions.

Learning Theme Application:

The Question: A child might ask, *"Can my superhero's cape fly to the moon?"* (untestable).
The Scientific Reframing: The teacher helps them reframe this into a testable inquiry: *"Which cape fabric will fly the furthest when thrown like a glider?"* (testable).

B. Fair Testing and Experimentation (The Super-Suit Trials)

The Disciplinary Skill: Understanding that to run a fair test, you must change only **one thing** (the independent variable) while keeping everything else exactly the **same** (controlled variables).

Learning Theme Application:
The Experiment: Testing different fabrics to find the most waterproof cape for a rainy rescue mission.
The Fair Test: Children learn that they must use the same amount of water, dripped from the same height, onto same-sized squares of different fabrics (cotton, plastic, foil, tissue). If they poured a whole bucket on the cotton but only one drop on the plastic, the test wouldn't be fair!

C. Observing and Measuring (Sensing the Clues)
The Disciplinary Skill: Using the senses and simple tools (magnifying glasses, timers, rulers, non-standard units like cubes) to observe changes closely over time.

Learning Theme Application:
The Observation: Children act as crime-scene investigators tracking a villain's path. They use magnifying glasses to examine "footprints" left behind in different soils, or use ice-cube "freeze rays" to observe how long it takes ice to melt under different warm conditions (light vs. dark spaces).

D. Classifying and Sorting (The Team-Up Database)
The Disciplinary Skill: Grouping objects, materials, or living things based on their shared physical characteristics, rather than just personal preference.

Learning Theme Application:
The Classification: Sorting a line-up of superhero sidekicks. Instead of sorting them by "coolness," children must classify them by scientific features: *Do they have scales, feathers, or fur? Are they carnivores or herbivores? Do they lay eggs?*

E. Gathering and Recording Data (The Secret Files)
The Disciplinary Skill: Recording findings in simple drawings, labelled diagrams, bar charts, and tables so that the results can be easily shared and understood.

Learning Theme Application:
The Record: After testing which superhero vehicles roll the furthest on different surfaces (carpet, wood, bubble wrap), children record the distance in a simple bar chart. They use this hard data to write a "secret lab report" recommending the best tires for the hero's car.
Substantive vs. Disciplinary: The Science Split

Substantive Science Knowledge (The Facts)	**Disciplinary Science Knowledge (The Method)**
Knowing that **plastic is waterproof** and **tissue paper is absorbent**.	**Designing an experiment** where water is dropped onto both materials to see which one lets water pass through.
Knowing that **humans have five senses**, including sight (eyes) and hearing (ears).	**Conducting a blindfolded test** to see if a "blind superhero" can locate a ticking villain countdown timer using only their ears.
Knowing that **wood, plastic, and metal** are everyday materials.	**Sorting a pile of mystery gadgets** into groups based on whether they are made of natural or

	man-made materials.

Why Disciplinary Science Knowledge Matters

1. It Builds Critical Thinkers, Not Passive Receivers

If we only teach substantive facts, children learn to treat science as a static list of things to memorise. Disciplinary knowledge teaches them that **science is an active, ongoing process of discovery**. It gives them the scepticism and curiosity to ask, *"How do we know that is true?"* and the practical skills to go find out the answer for themselves.

2. It Teaches the Value of 'Failure' in Learning

In a fair test, a child's prediction (hypothesis) is often proven wrong—their chosen superhero cape fabric might turn out to be completely useless in water. Disciplinary knowledge teaches them that **an unexpected result is not a failure; it is valuable data**. It teaches resilience and intellectual honesty, showing them that discovering what *doesn't* work is a vital step toward finding what *does*.

3. It Prepares Children for the Modern, Data-Driven World

Even at Key Stage 1, learning how to collect data, spot patterns, and record findings in a simple table builds fundamental analytical skills. It teaches children how to look past guesses and opinions, relying instead on **observable, measurable evidence** to make decisions—a skill that is crucial not just in science, but in reading, Maths, and daily problem-solving.

Learning Objectives

Working Scientifically (Key Skills applied across topics):

Asking simple questions and recognising that they can be answered in different ways.

Superhero link: "What material would be best for a superhero's cape to make them fly faster?" "How could a superhero see in the dark?" "What power would help us clean up pollution quickly?"

Observing closely, using simple equipment.

Superhero link: Observing different materials to see which is strongest/most flexible for a superhero costume. Observing how things move (e.g., toy cars, balls) to understand forces. Using magnifying glasses to look closely at textures for superhero gadgets.

Performing simple tests.

Superhero link: Testing which material is most waterproof for a superhero's shield. Testing which toy car travels furthest to understand friction. Testing which type of 'glue' (e.g., tape, PVA) holds materials best for a superhero invention.

Identifying and classifying.

Superhero link: Classifying materials used in superhero costumes or gadgets (e.g., hard, soft, stretchy, bendy). Grouping superheroes by their powers (e.g., flight, super strength, invisibility). Classifying 'super-foods' that give us energy.

Using their observations and ideas to suggest answers to questions.

Superhero link: After testing materials, children can suggest why a particular material would be good for a superhero's boots. Suggesting how a superhero might use their senses to detect danger.

Gathering and recording data to help in answering questions.

Superhero link: Drawing or tallying results from material tests. Drawing or writing observations about how different forces affect objects (e.g., pushing a car, pulling a toy).

1. Everyday Materials:
Objective: Distinguish between an object and the material from which it is made.
Superhero link: Identifying a superhero's cape (object) is made from fabric (material); a shield (object) is made from metal (material).
Objective: Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.
Superhero link: Discussing what different superhero gadgets or parts of their lair might be made from (e.g., metal for a robot sidekick, plastic for a communication device).

Objective: Describe the simple physical properties of a variety of everyday materials.
Superhero link: Exploring properties relevant to superhero gear:
Strong/Weak: What material is strong enough for a superhero's armour?
Flexible/Stiff: What material is flexible enough for a cape but stiff enough for a shield?
Waterproof/Absorbent: What material would keep a superhero dry in the rain?
Transparent/Opaque: What material would a superhero use for a secret window vs. a disguise?
Shiny/Dull: What material would make a superhero look impressive?

Objective: Compare and group together a variety of everyday materials on the basis of their simple physical properties.
Superhero link: Grouping materials that would be good for a superhero's stealth mission (dull, dark) vs. a flashy rescue (shiny, bright). Sorting materials that are good for building a strong hideout.

Objective: Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.
Superhero link: Exploring how playdough or modelling clay (for a superhero's disguise) can be squashed and stretched. Testing elastic to see how much it stretches for a superhero's stretchy suit.

2. Animals, including humans:
Objective: Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.
Superhero link: Discussing how superheroes use their senses to detect danger (e.g., super hearing with ears, super sight with eyes, super smell with nose). Labelling a human body diagram and considering which parts would need to be super strong or agile for a superhero.

Objective: Describe the importance for humans of exercise, eating the right amount of different types of food, and hygiene.
Superhero link: Discussing how superheroes need to be fit and healthy to do their job – linking to the importance of exercise (running, jumping, balancing like a superhero) and healthy eating (what gives them energy and strength). Why do superheroes need to wash their hands after a mission?

Objective: Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).
Superhero link: Even superheroes need food, water, and air to survive! Discussing how villains might try to remove these from heroes or ordinary people. Considering how superheroes might ensure everyone has these basic needs.

3. Plants (Optional, but can be linked):

Objective: Identify and name a variety of common wild and garden plants.
Superhero link: Perhaps a 'nature superhero' whose powers come from plants, or a villain who uses plants in a tricky way. Children could identify plants in a 'superhero garden' or 'healing herb' patch.

4. Living Things and Their Habitats (Optional, but can be linked):
Objective: Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants.
Superhero link: Some superheroes might be "animal whisperers" or have animal-based powers. This could lead to a discussion about different animal habitats and how the animals' features help them survive there.

Lesson Ideas

This 6-week Medium-Term Plan for Key Stage 1 Science uses a '**Superhero Academy**' theme to deliver core National Curriculum science concepts. The overarching inquiry question for this unit is: **'How can we use science to design the ultimate superhero suit, train our super-senses, and classify our animal sidekicks?'**

Theme: Superhero Academy: Lab Training
Duration: 6 Weeks (1 Hour per week)
Core Project: Designing and testing a superhero suit and gadget kit using scientific evidence.

The 6-Week Science Scheme

WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
Suit Materials	Waterproof Capes	Super Shields	Super Senses	Animal Sidekicks	Body Supercharge
Identify & Sort	Fair Testing	Strength Testing	Sensory Detectives	Classify Vertebrates	Heart Rate & Health

Week 1: Mapping the Super-Suit (Everyday Materials)
Substantive Knowledge (The 'What'):
Know that objects are made from different materials (e.g., wood, metal, plastic, glass, fabric, rock, paper).
Understand the difference between an *object* (e.g., a shield) and the *material* it is made from (e.g., metal).
Disciplinary Knowledge (Working Scientifically):
Classifying: Sort everyday superhero items into groups based on the materials they are made from.
Observing: Use close observation to identify raw materials.
The Mission: *The Gear Check.* Pupils examine a box of mystery superhero gear (a wooden block, a metal spoon, a plastic toy, a fabric cape, a paper mask). They label each object and sort them into "material hoops" to prove they can distinguish objects from materials.

Week 2: The Waterproof Cape Test (Material Properties)
Substantive Knowledge (The 'What'):
Know that materials have different properties, specifically **waterproof** (does not let water pass through) and **absorbent** (soaks up water).
Disciplinary Knowledge (Working Scientifically):
Fair Testing: Perform a simple test where only one thing changes (the material) while keeping everything else the same (amount of water, size of material, height of drip).
Predicting: Make a simple prediction about which material will keep a superhero dry.
The Mission: *The Rainproof Cape Lab.* Pupils test four different materials (foil, cotton fabric, tissue paper,

plastic wrap) to find the best cape for a rainy rescue. They use a pipette to drop exactly 5 drops of water on each and observe whether the water pools on top (waterproof) or sinks in (absorbent).

Week 3: The Unbreakable Shield (Rigidity & Strength)
Substantive Knowledge (The 'What'):
Know that some materials are **stiff**(rigid, hard to bend) and **strong** (can withstand forces), while others are **flexible** (bendy) and **fragile** (breaks easily).
Disciplinary Knowledge (Working Scientifically):
Measuring & Recording: Measure the effect of a force on different materials and record the results in a simple table.
Analysing: Use observations to decide which material is best suited for a specific job.
The Mission: *The Asteroid Blocker.* Pupils test different materials (cardboard, paper, foam, thin plastic plates) to see which makes the strongest shield. They drop a weighted tennis ball ("an asteroid") from a set height onto each material suspended over a plastic tub to see which material bends, tears, or holds its shape.

Week 4: Super Senses (Humans & Anatomy)
Substantive Knowledge (The 'What'):
Name and locate the basic external parts of the human body.
Know that humans have five senses: **sight** (eyes), **hearing** (ears), **touch** (skin/hands), **smell** (nose), and **taste** (tongue).
Disciplinary Knowledge (Working Scientifically):
Gathering Evidence: Use physical senses to gather clues and identify mystery objects without looking at them.
The Mission: *The Detective Training.* To defeat a villain who has hidden "mystery capsules," pupils must use their senses. They smell mystery scent jars (using their nose), listen to sound shakers filled with rice or coins (using their ears), and reach into "feel bags" (using their hands) to identify hidden objects.

Week 5: Animal Sidekicks (Animal Groups)
Substantive Knowledge (The 'What'):
Know that animals can be grouped into **mammals, birds, fish, reptiles, and amphibians**.
Know that animals can also be grouped by what they eat: **carnivore** (meat-eaters), **herbivore** (plant-eaters), and **omnivore** (eaters of both).
Disciplinary Knowledge (Working Scientifically):
Classifying: Group living things using a simple identification key or sorting chart based on their physical features.
The Mission: *The Sidekick Recruitment.* A superhero team needs animal helpers (e.g., an owl, a frog, a dog, a lizard). Pupils look at cards detailing each animal's features (fur, feathers, scales, wet skin) and sort them into their correct biological groups to build a balanced team of sidekicks.

Week 6: Supercharging our Bodies (Basic Human Survival)
Substantive Knowledge (The 'What'):
Know that humans need **water, food, and air** to survive.
Know that exercise is vital to keep our hearts and bodies healthy.
Disciplinary Knowledge (Working Scientifically):
Observing Changes: Observe and describe how our bodies feel before, during, and after physical exercise.
The Mission: *The Hero Workout.* Pupils measure their resting heart rate (by putting a hand on their chest

and counting "thumps" or feeling their breathing rate). They perform a 2-minute "Superhero Cardio Workout" (jumping jacks/running in place) and then measure the changes. They record how their breathing, body heat, and heartbeat have changed to understand how exercise keeps their body healthy.

Assessment Indicators

Use these observational targets throughout the 6-week unit to measure pupil progress:

Developing (Working Toward)	Secure (Expected Standard)	Greater Depth (Exceeding)
Can identify common materials like wood or paper but struggles to explain *why* their properties make them useful.	**Identifies and compares everyday materials by their properties (e.g., waterproof, stiff).** **Conducts fair tests with support.** **Correctly names the five senses and links them to body parts.**	Explains clearly how a material's properties make it suitable or unsuitable for a job Independent in setting up fair tests. Uses advanced scientific vocabulary to describe bodily changes during exercise.

Other Information, Ideas and Resources

Forces and Movement (Super Strength & Speed):

Super Push and Pull: Explore how superheroes move objects with pushes and pulls. Have children experiment with different ways to move toys (pushing, pulling, rolling) and relate it to a superhero moving a heavy object or pulling someone to safety.

Superhero Speed Trials: Investigate how different surfaces affect how fast a toy car (the superhero's vehicle!) can travel. Use ramps and different materials like carpet, wood, and tiles. Talk about friction slowing things down, like a villain trying to stop a fast superhero.

Flying High: Investigate things that fly. Make paper aeroplanes and discuss how pushing them forward makes them move through the air. Relate this to superheroes flying and the force they use to propel themselves.

Materials (Super Gadgets & Costumes):

Super Sorting: Explore different materials used for superhero costumes and gadgets. Have children sort objects based on their properties (shiny, rough, soft, hard, waterproof). Discuss why certain materials might be good for a superhero's suit (e.g., strong for protection, flexible for movement).

Waterproof Wonders: Test different materials to see which are waterproof, like a superhero's cape that keeps them dry in the rain. Use droppers to put water on different fabrics and observe what happens.

Mixing Magic: Investigate simple mixing, like making coloured water potions for a superhero's secret lab. Talk about how some things mix and some don't.

Light and Shadows (Invisible Powers & Secret Signals):

Shadow Superheroes: Explore how light creates shadows. Use torches and cut out superhero shapes to make shadow puppets. Discuss how a superhero might use shadows to hide.

Super Signals: Investigate how light can be used to send signals. Use torches to flash messages and discuss how a superhero might use a light signal.

Living Things (Super Senses & Animal Powers):
Super Senses: Explore our five senses and how they help us. Discuss how some superheroes have enhanced senses, like super hearing or super sight, and which animals have similar amazing senses.

Animal Allies: Learn about different animals and their amazing abilities. Discuss how a superhero might have powers inspired by animals (e.g., the speed of a cheetah, the strength of an ant).

Considerations for Implementation

Throughout these activities, encourage children to:
Ask questions: "Why does that happen?" "What if we try this?"
Make predictions: "What do you think will happen next?"
Observe carefully: "What do you see?"
Record their findings: Draw pictures or use simple words to note what they discover.
Talk about their ideas: Share their thoughts and explanations.

English

Book/Text Ideas

https://www.booksfortopics.com/superheroes

Fiction:
Supertato – Paul Linnet and Sue Hendra
There's a Superhero in Your Book – Tom Fletcher
Superhero ABC – Bob Mcleod
Traction Man Is Here - Mini Grey
Juniper Jupiter - Lizzy Stewart
Nat Fantastic - Giles Andreae & Katharine McEwen
Super Daisy - Kes Gray & Nick Sharratt
Newspaper Boy and Origami Girl - Michael Foreman
Max - Bob Graham
Superhero Hotel - Abie Longstaff & Migy Blanco
My Mum Is a Supermum - Angela McAllister & Alex T. Smith
The Astonishing Secret of Awesome Man - Michael Chabon & Nick Parker
Cartoon Kid - Jeremy Strong
5-Minute Marvel Stories - Dbg
Superhero Street - Phil Earle & Sara Ogilvie

Non-Fiction:
Superheroes Like You by Dr Ranj and Liam Darcy (picture book) – KS1
Poetry:
Mr and Mrs Books – Janet and Allan Ahlberg
You can do anything – Akala
If I were in charge of the World – Judith Viorst
Eliot Midnight Superhero - Anne Cottringer & Alex T. Smith
Ten Little Superheroes – Mike Brownlow
Superworm – Julia Donaldson

Zog and the Flying Doctors

Substantive Knowledge

In Key Stage 1 English, **substantive knowledge** consists of the essential, concrete building blocks of language—the specific facts, spelling rules, phonetic codes, grammatical structures, and physical mechanics of reading and writing. By framing these structural rules of language within the **'Superheroes'** learning theme, abstract mechanics like punctuation, phonics, and sentence structures become immediate, exciting tools. Instead of just learning what an adjective is, children learn how to select "power words" to describe their hero's suit; instead of practicing rote handwriting, they write secret missions.

The Core Substantive Domains under the 'Superheroes' Learning Theme
The Key Stage 1 National Curriculum divides English into three primary domains. Here is the substantive knowledge required for each, brought to life through the superhero lens:

A. Oracy (Spoken Language): The Hero Briefing
The Substantive Base: Knowing how to take turns in a conversation, listen actively to others, ask relevant questions, and use descriptive Tier 2 vocabulary (e.g., *courageous, invisible, hover, agile*). Understanding how to speak in complete, grammatically correct sentences.

Learning Theme Application:
The Activity: Pupils take turns in a "Secret Agent Briefing." One child describes a villain's behaviour, and the partner must listen actively and ask a clarifying question: *"Did the shadow-villain sneak through the window or jump over the roof?"*

B. Reading: Unlocking the Secret Files
The Substantive Base:
Word Reading: Grapheme-Phoneme Correspondences (GPCs)—knowing that specific letter combinations (*graphemes*) represent specific spoken sounds (*phonemes*). Knowing how to read common exception words (such as *he, she, they, go, standard irregular spellings*) by sight.
Comprehension: Understanding text structures (titles, chapters), predicting what happens next, retrieving basic facts, and drawing simple inferences based on what characters do and say.

Learning Theme Application:
The Activity: Children read simple superhero decodable books (e.g., *Traction Man* or *Superbat*). They use their phonics knowledge to decode compound words like *su-p-er-h-e-r-o* or *force-field*. They practice retrieval skills by answering: *"What gadget did the hero use to escape the trap?"*

C. Writing: Drafting the Mission Report
The Substantive Base:
Transcription: Knowing how to spell words using taught phonics rules, forming lower-case and capital letters in the correct direction and size relative to each other, and using clear word spaces.
Grammar & Punctuation: Using capital letters, full stops, question marks, and exclamation marks. Knowing how to write four sentence types: **statements**, **questions**, **exclamations**, and **commands**. Using coordination (*and, but, or*) and subordination (*because, when, if*).

Learning Theme Application:
The Activity: Writing a "Hero Profile." Children must apply their substantive writing knowledge to construct sentences:
Statement: "The hero has a shiny blue cape."

Exclamation: "What a powerful shield he has!"
Coordination: "He can fly high **but** he cannot swim."

Substantive English Knowledge Reference

Domain	Key National Curriculum Fact (The 'What')	Superhero Context
Punctuation	Sentences must start with a capital letter and end with a full stop, question mark, or exclamation mark.	**The Battle Cry:** Writing "Crash!" or "Boom!" using exclamation marks to show action.
Grammar	An **expanded noun phrase** uses adjectives before a noun to add detail (e.g., *the red car*).	**The Secret Identity:** Describing a hero: *"the **brave, metallic** knight."*
Phonics / Decoding	Blending sounds (GPCs) to read multi-syllable and compound words.	**Gadget Decoders:** Reading words like *space-ship*, *laser-beam*, or *he-lo-pad.*
Oracy	Using standard English tenses (past and present) and maintaining focus on a topic.	**The News Report:** Orally reporting a superhero rescue using the past tense: *"She flew... she saved..."*

Why Substantive English Knowledge Matters in Key Stage 1

1. It Frees Up Cognitive Load for Creativity

If a child has to struggle to remember how to form the letter "b," or has to stop and guess how to decode every third word, their working memory becomes completely overloaded. They have no mental space left to think about *what* they want their superhero to do. Solidifying substantive knowledge (phonics, basic spelling, letter formation) automates the mechanics of literacy, freeing up the child's mind to focus on creative storytelling, character development, and complex ideas.

2. It Provides the 'Rules of the Game'

Children cannot successfully express their imagination without structure. Substantive grammar and punctuation knowledge are the building blocks of clear communication. Teaching a child how to use coordination (e.g., *and, but*) or subordination (e.g., *because*) gives them the linguistic architecture they need to explain cause and effect: *"The hero ran **because** the volcano erupted."* Without these structural rules, writing remains fragmented and hard to follow.

3. It Prevents Literacy 'Gaps' from Widening

In Key Stage 1, reading and writing development happens at a rapid pace. If a child does not secure their substantive phonics knowledge (GPCs) or struggle with forming high-frequency common exception words early on, they quickly fall behind as texts become more complex in Key Stage 2. Ensuring every child secures these core linguistic facts during these foundational years is the single most effective way to ensure long-term academic confidence and equity.

Disciplinary Knowledge

While **substantive knowledge** provides the factual tools of English (such as phonics rules and grammar terminology), **disciplinary knowledge** represents the *practices* of the subject. It is the understanding of

how to think, act, and communicate like a reader, a writer, and a speaker.
In a **'Superheroes'** learning theme, disciplinary knowledge is what transforms a child from someone who merely *decodes* words or *copies* sentences into a **storyteller, an analytical critic, and a purposeful writer.** It is the transition from knowing the rules of language to knowing how to bend them for dramatic effect.

Core Disciplinary English Domains: The 'Superhero' Framework
In Key Stage 1, disciplinary knowledge is organised across the three foundational pillars of English.

A. Oracy (Spoken Language): Speaking with Impact
The Disciplinary Skill: Understanding that we change our tone, volume, and pace depending on *who* we are talking to and *why* we are talking. It is the ability to negotiate, collaborate, and construct a spoken narrative.

Learning Theme Application:
Roleplay & Tone: Pupils don't just read a superhero script; they practice *how* to deliver a "heroic call to action" versus a "villainous whisper." They learn that slowing down their speech and lowering their pitch can create suspense.
Collaborative Dialogue: During a group planning session to "save the classroom," children practice building on other people's ideas: *"I like your idea, and we could also add..."*



Oracy in Action: Teaching KS1 students how to active-listen, project, and discuss collaborative ideas in a structured forum.. Source: SolStock / Getty Images

B. Reading: Thinking Like a Critic & Detective
The Disciplinary Skill: Moving beyond mechanical decoding (sounding out words) to active comprehension—making inferences, predicting outcomes based on character behaviour, and understanding that authors make deliberate choices to make us feel certain things.

Learning Theme Application:
Inferencing: When reading a book like *Traction Man*, children look closely at the illustrations and text to answer: *"How do we know Traction Man is feeling embarrassed here?"* (e.g., looking at his body language while wearing the hand-knitted green romper suit).
Evaluating Author Choice: Asking children: *"Why did the author use the word 'zoomed' instead of 'went'?"* This helps them see that writers choose specific verbs to paint a picture of super-speed.

C. Writing: Adopting the Author's Persona
The Disciplinary Skill: Understanding that writing is a multi-step journey: **planning, drafting, editing, and sharing.** It is realising that we write with a specific audience in mind and that we can evaluate our own work to make it better.

Learning Theme Application:
The Writing Process: Rather than just writing a story in one sitting, children map out their hero's journey using a visual story map. They draft their ideas, read them aloud to check if they make sense, and edit their punctuation using a green "editing superhero cape."
Writing for a Purpose: Realising that a "Wanted Poster" for a escaped villain needs to be bold, clear, and persuasive so that the "public" can help catch them.

Substantive vs. Disciplinary: The English Split

Substantive English Knowledge (The 'What')	Disciplinary English Knowledge (The 'How')
Knowing that **adjectives** are words used to describe a noun.	**Selecting specific adjectives** (e.g., *slimy* vs. *shadowy*) to make a villain sound genuinely frightening to the reader.
Knowing how to **decode GPCs** (Grapheme-Phoneme Correspondences) to read words.	**Using a character's dialogue** to infer how they are feeling, even if the text doesn't explicitly state it.
Knowing that **exclamation marks** are used to show excitement or shock.	**Reading a comic strip aloud** and using your voice to dramatically express surprise when an exclamation mark appears.

Why Disciplinary English Knowledge Matters in KS1
1. It Transitions Children from 'Decoders' to 'Readers'
Phonics is the engine of reading, but comprehension is the destination. If we only teach the substantive mechanics of reading, children can become highly skilled at sounding out words without actually understanding or enjoying the story. Disciplinary reading skills teach them to engage with the text, ask questions of the author, and fall in love with the magic of narrative worlds.

2. It Empowers Agency and 'Authorial Voice'
When a child understands *why* they are writing and *who* they are writing for, their relationship with the page changes. They stop writing just to please the teacher and start writing to entertain, persuade, or explain. Teaching them how to draft, edit, and take pride in their authorial choices builds creative agency and resilience when tackling complex writing tasks.

3. It Prepares Them for Social and Academic Expression (Oracy)
Oracy is the foundation of all literacy. A child who can orally rehearse a story, argue a point, and listen critically to a peer is far more equipped to write coherent sentences. Disciplinary oracy provides the social tools children need to collaborate, share space, compromise, and articulate complex ideas clearly—skills that are foundational for their academic journey and their development as young citizens.

Learning Objectives

1. Spoken Language:
Objective: Listen and respond appropriately to adults and their peers.
Superhero link: Listening to stories about superheroes, listening to instructions for designing a superhero, responding to classmates' ideas during a 'superhero team' planning session.

Objective: Ask relevant questions to extend their understanding and knowledge.
Superhero link: Asking questions about superhero powers, costumes, or villain's plans; interviewing a 'visiting superhero' (teacher in character).

Objective: Articulate ideas and opinions clearly in full sentences.
Superhero link: Explaining what makes a good superhero, describing their own superhero's powers, giving reasons for their choices in designing a superhero gadget.

Objective: Participate in discussions, presentations, performances, role play and debates.
Superhero link: Role-playing superhero missions; presenting their own superhero creation; debating who is the 'best' superhero and why; performing a short superhero play.

Objective: Consider and evaluate different viewpoints, explaining their own.
Superhero link: Discussing whether a 'villain' could ever be good, or why a certain action by a superhero might be tricky.

2. Reading - Word Reading:
Objective: Apply phonic knowledge and skills to decode words.
Superhero link: Decoding names of superheroes/villains, words associated with powers (e.g., 'flight', 'strength'), or places (e.g., 'city', 'lair') in superhero stories.

Objective: Read accurately and with increasing speed and fluency.
Superhero link: Practising reading sentences or short texts about superheroes, reading captions for superhero pictures.

Objective: Read common exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word.
Superhero link: Identifying words like 'power', 'great', 'secret', 'brave' within superhero texts.

3. Reading - Comprehension:
Objective: Understand both the books they can already read accurately and fluently and those they listen to by:
Drawing on what they already know or on background information and vocabulary provided by the teacher.
Superhero link: Activating prior knowledge about good vs. evil, discussing new vocabulary like 'villain',

'identity', 'gadget' before reading a story.

Checking that the text makes sense to them as they read and correcting inaccurate reading.
Superhero link: Self-correcting when reading about a superhero's actions if it doesn't align with the story.

Making inferences on the basis of what is said and done.
Superhero link: Inferring how a superhero feels based on their actions or expressions; inferring why a villain might act a certain way.

Predicting what might happen next on the basis of what has been read so far.
Superhero link: Predicting how a superhero will defeat a villain or what power they might use next.
Participate in discussion about books, poems and other works that are read to them and those they can read for themselves, taking turns and listening to what others say.
Superhero link: Discussing favourite superheroes, comparing different superhero stories, talking about the moral of a superhero tale.

Explain and discuss their understanding of books, poems and other works, and prepare their ideas for discussion.
Superhero link: Explaining what a superhero's mission was, or how they saved the day.

4. Writing - Transcription (Spelling & Handwriting):
Objective: Write sentences by saying them aloud before writing.
Superhero link: Practising saying aloud sentences about their superhero's adventures before writing them down.

Objective: Spell words containing each of the 40+ phonemes already taught.
Superhero link: Spelling words like 'cape', 'mask', 'power', 'fight'.

Objective: Spell common exception words.
Superhero link: Practising spelling words like 'there', 'said', 'where', 'because' within superhero-themed sentences.

Objective: Learn to spell days of the week.
Superhero link: Writing a superhero's training schedule or mission log for different days.

Objective: Form lower-case letters correctly, using the correct formation.
Superhero link: Practising neat handwriting for their superhero's name, or for messages from 'superhero HQ'.
Objective: Begin to form upper-case letters and digits.
Superhero link: Forming capital letters for superhero names and the start of sentences.

Objective: Use spacing between words that is appropriate for the size of the letters.
Superhero link: Ensuring clear spacing when writing about superhero adventures.

5. Writing - Composition:
Objective: Write sentences that are sequenced to form short narratives.

Superhero link: Writing a short story about a superhero's adventure, including a beginning (problem), middle (action/powers), and end (resolution).

Objective: Write for different purposes (e.g., stories, recounts, instructions, captions, lists).
Superhero link:
Stories: Superhero adventure stories, origin stories.
Recounts: A 'news report' about a superhero saving the day.
Instructions: How to make a superhero mask/gadget, instructions for training to be a superhero.
Captions: For pictures of superheroes/villains.
Lists: List of superhero powers, villains, gadgets, or weaknesses.

Objective: Use capital letters for proper nouns (names of people, places, etc.) and for the start of a sentence.
Superhero link: Capitalising superhero names (e.g., 'Captain Comet', 'Wonder Woman'), names of cities they protect.

Objective: Use full stops, question marks, and exclamation marks correctly.
Superhero link: Using exclamation marks for superhero shouts or exciting actions; question marks for superhero questions; full stops for clear sentences in their stories.

Objective: Use relevant vocabulary, including adjectives.
Superhero link: Using exciting adjectives to describe superhero powers ('amazing', 'incredible'), costumes ('sparkling', 'shiny'), or villains ('evil', 'sneaky').

Objective: Use the conjunction 'and' to join clauses.
Superhero link: "The superhero flew fast *and* saved the cat."

Lesson Ideas

This 6-week Medium-Term Plan for Key Stage 1 English (Reading and Writing) uses a **'Superhero Academy'** theme. The lessons build toward a final writing project: **producing a complete 'Superhero Adventure Folder' containing a Character Profile, a Wanted Poster, and a short Rescue Narrative.** This scheme integrates core National Curriculum English expectations, balancing the mechanical rules of writing (**substantive**) with the craft of being an author and critical reader (**disciplinary**).

Theme: Superhero Academy: Author's Studio
Duration: 6 Weeks (approx. 4–5 hours per week)
Core Text Ideas: *Traction Man is Here* by Mini Grey, *Superbat* by Alexis Deacon, or *Eliot, Midnight Superhero* by Anne Cottringer.

The 6-Week English Scheme

WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
Character Profiles	The Evil Villain	The Distress Call	Story Mapping	Drafting the Rescue	Publish & Share
Expanded Nouns	Wanted Posters	Command Sentences	Narrative Arc	Writing & Editing	Oracy Celebration

Week 1: Designing the Hero (Character Profiles)
Substantive Knowledge (The 'What'):

Learn how to write an **expanded noun phrase** (adjective + adjective + noun, e.g., "the *brave, metallic* helmet").
Maintain consistent use of finger spaces, capital letters, and full stops.
Disciplinary Knowledge (Working like a Writer/Reader):
Writer's Craft: Choose specific adjectives that match a character's physical traits and powers, avoiding generic words like "good" or "nice."
Reading Comprehension: Retrieve details from illustrations in a core text (e.g., *Traction Man*) to explain what a character looks like.
The Writing Outcome: A labelled "Superhero Blueprint" illustration accompanied by a character profile using descriptive expanded noun phrases.

Week 2: Outlawed! (The Villain Wanted Poster)
Substantive Knowledge (The 'What'):
Understand and write **exclamation sentences** starting with 'What' or 'How' (e.g., "What a terrible smell!" or "How sneaky she is!").
Use the prefix **un-** to describe negative traits (e.g., *kind* → *unkind*, *helpful* → *unhelpful*).
Disciplinary Knowledge (Working like a Writer/Reader):
Writing for Purpose: Understand that a "Wanted Poster" needs to persuade the public to stay alert and assist the police. Use bold, eye-catching vocabulary.
Inference: Infer a villain's motives and feelings based on clues in a text.
The Writing Outcome: A "WANTED!" poster detailing the villain's physical description, their "un-" traits, and a dramatic exclamation warning to the public.

Week 3: The Distress Call (Composing Commands)
Substantive Knowledge (The 'What'):
Identify and construct **command sentences** using imperative "bossy" verbs at the start (e.g., "*Stop* that thief!", "*Fly* to the roof!", "*Help* the citizens!").
Correctly use exclamation marks (!) for emphasis or emergency instructions.
Disciplinary Knowledge (Working like a Writer/Reader):
Oracy/Tone: Practice reading commands aloud with varying intonation and volume to convey urgency during a "heroic briefing."
Purpose: Recognise how different sentence types (statements vs. commands) alter the urgency of a message.
The Writing Outcome: A secret, bulleted "Emergency Action Plan" or a transcript of a distress radio signal sent to the Superhero Headquarters.

Week 4: The Threat Rises (Story Mapping the Rescue)
Substantive Knowledge (The 'What'):
Know how to use coordinating conjunctions (**and**, **but**, **or**) to join two simple ideas into a compound sentence.
Correctly sequence a short narrative into a beginning, middle, and end.
Disciplinary Knowledge (Working like a Writer/Reader):
Story Mapping: Plot a physical timeline of the story's events to organise thoughts sequentially before writing.
Predicting: Read a portion of a class text, stop at the climax, and predict how the hero will solve the

problem.
The Writing Outcome: A visual, illustrated "Mission Map" detailing the beginning (the problem), the middle (the hero's journey), and the end (the resolution), with joining sentences.

Week 5: Saving the Day (Drafting the Narrative)
Substantive Knowledge (The 'What'):
Write consistently in the **past tense** (using "-ed" suffix rules, e.g., *zoomed, crashed, rescued*).
Use subordination (**because**, **when**, **if**) to show cause and effect (e.g., "The hero jumped *because* the bridge collapsed").
Disciplinary Knowledge (Working like a Writer/Reader):
Drafting & Editing: Review draft sentences aloud. Use a green "editing pencil" to check for missing capital letters, full stops, and sound-spelling errors.
The Writing Outcome: A structured three-part mini-adventure story describing how the child's superhero rescued a citizen from the villain.

Week 6: The Hero's Gallery (Publishing & Oracy)
Substantive Knowledge (The 'What'):
Write with neat, legible, and consistently sized handwriting, ensuring letters sit on the line.
Speak clearly using standard English structures to present work.
Disciplinary Knowledge (Working like a Writer/Reader):
Publishing: Understand that final drafts are polished for an audience to read.
Speaking and Listening: Read their finished narrative to a peer group, using vocal expression for dialogue, and listen respectfully to others' presentations.
The Writing Outcome: A beautiful, hand-written "Superhero Adventure Folio" showcased in a classroom gallery exhibition, celebrated with a group oral reading session.

Assessment Indicators (Reading & Writing)
Use these milestones to gauge progress across the 6-week unit:

Developing (Working Toward)	Secure (Expected Standard)	Greater Depth (Exceeding)
Uses simple phonics to write short sentences. Needs prompting to include capital letters and full stops. Identifies obvious details in hero stories with help.	**Uses expanded noun phrases, command sentences, and basic coordination (and/but/because) with consistent punctuation.** **Correctly sequences a story map and infers basic character emotions.**	Varies sentence lengths intentionally for dramatic effect. Uses advanced vocabulary choices (Tier 2 words) and makes insightful inferences about a character's motives when reading.

Other Information, Ideas and Resources

Storytelling and Creative Writing:
'My Own Superhero' Character Creation:
Show, don't tell: Instead of just saying "Draw your superhero," guide them to think about:
Appearance: What do they look like? What do their clothes say about them? (e.g., a flowing cape suggests

speed, bright colours show confidence).
Powers: What amazing things can they do? Encourage imaginative ideas beyond just flying and super strength. Maybe they can talk to animals, make things invisible, or have super kindness!
Secret Identity: Do they have a normal life when they're not saving the day? What's their everyday name?
Weakness: Even superheroes have weaknesses! What makes them vulnerable? (e.g., a certain colour, loud noises, being tickled).
Activity: Children draw and label their superhero, then write simple sentences describing them. For a challenge, they can write a short paragraph.

'Superhero Adventures':
Show, don't tell: Instead of just saying "Write a story," provide story starters or visual prompts:
"Oh no! The mischievous Meanie has stolen all the..." (cakes, toys, colours, etc.).
Show pictures of everyday problems that a superhero could solve (e.g., a cat stuck in a tree, a lost puppy, someone feeling sad).
Activity: Children write their own superhero stories, focusing on a simple plot (problem, superhero saves the day, happy ending). Encourage them to use descriptive language for actions and sounds (e.g., "Zoom!", "Bang!", "Whizzed").

'If I Were a Superhero...' Poems:
Show, don't tell: Introduce simple rhyming patterns (AABB) and discuss what actions and feelings they might have as a superhero.
Activity: Children complete simple rhyming couplets about their superhero selves (e.g., "If I were Super Swift, I'd run and give a gift.").

Superhero Comic Strips:
Show, don't tell: Look at simple comic strips together, focusing on speech bubbles and action words.
Activity: Children create their own short comic strips with simple drawings and speech bubbles showing their superhero in action.

Reading and Comprehension:
Exploring Superhero Picture Books:
Show, don't tell: Choose a variety of superhero books with different styles and messages. Focus on:
Character Analysis: Discuss the superheroes' qualities (brave, kind, determined).
Problem and Solution: Identify the challenges the superheroes face and how they overcome them.
Vocabulary: Introduce new words related to superpowers and actions.
Activity: Read aloud and ask questions about the story. Children can retell the story in their own words or act out scenes.

Superhero Fact Files:
Show, don't tell: Create simple fact files about fictional or even real-life "heroes" (e.g., firefighters, doctors). Focus on key information.
Activity: Children can create their own fact files about their invented superheroes, including their name, powers, and secret identity.

Superhero Word Hunts:
Show, don't tell: Provide texts related to superheroes and ask children to find specific words (e.g., action verbs, descriptive adjectives).

Activity: Create word searches or bingo games with superhero-themed vocabulary.

Speaking and Listening:
'Superhero Interviews':
Show, don't tell: Model how to ask and answer simple questions in an interview format.
Activity: Children take on the roles of superheroes and interview each other about their powers and adventures.

'Superhero Mission Briefings':
Show, don't tell: Explain what a briefing is (giving important information before a task).
Activity: Children work in pairs or small groups to plan and deliver a short "mission briefing" for their superhero, outlining the problem and their plan to solve it.

'Superhero Charades/Pantomime':
Show, don't tell: Demonstrate how to act out actions and powers without speaking.
Activity: Children take turns acting out their superhero or their powers for others to guess.

Grammar and Punctuation:
Action Verbs: Focus on verbs that show the superheroes' actions (flies, zooms, crashes, saves).
Activity: Create sentences about superheroes and ask children to identify the action verbs. They can also write their own sentences using exciting action verbs.

Adjectives: Explore descriptive words to make their superheroes and stories more engaging (brave, strong, speedy, amazing).
Activity: Provide nouns (e.g., cape, villain) and ask children to think of describing adjectives.

Sentence Structure: Focus on simple subject-verb-object sentences related to superheroes (e.g., "Super Sparkle catches the robber.").
Activity: Provide jumbled words and ask children to create grammatically correct sentences about superheroes.

Speech Bubbles: Introduce the use of speech marks in speech bubbles.
Activity: Look at comic strips and discuss how speech is written. Children can add speech bubbles to their own superhero drawings.

Considerations for Implementation

Cross-Curricular Links:
Art: Designing superhero costumes and logos, creating comic book panels.
PSHE: Discussing the qualities of a real-life hero (kindness, courage, helping others).

Maths

We use White Rose Maths for day-to-day Maths the ideas below are for enhanced provision.

Substantive Knowledge

In Key Stage 1 Mathematics, **substantive knowledge** consists of the concrete, foundational mathematical facts, rules, symbols, and procedures. It is the absolute "raw data" of math—things like knowing that the symbol ✦ means add, recognising that 15 is made of one ten and five ones, and memorising the names of 3D

shapes. By framing these rigorous mathematical truths within a **'Superheroes'** learning theme, abstract numbers and geometric terms transform into tangible, exciting mission stats. Instead of memorising number bonds on a plain worksheet, children are calculating power-boost levels for their hero's gadget kit.

Core Substantive Math Domains: The 'Superhero' Framework
Under the National Curriculum for KS1, the essential substantive facts are broken down into key domains:

A. Number & Place Value (Tracking the Hero's Stats)
The Substantive Base: Knowing how to read, write, and count numbers to 100. Understanding **place value** (tens and ones). Counting in steps of 2, 5, and 10.

Learning Theme Application:
The Activity: Reading a "Superhero Radar." Pupils must identify numbers on a number grid to track where villains are hiding. They group "ener-gems" into bundles of 10s and leftover 1s to find the total power level of their suit (e.g., 3 tens and 4 ones = 34 power points).

B. Addition & Subtraction (Calculating Action Points)
The Substantive Base: Memorising **number bonds to 10 and 20** (e.g., 8 + 2 = 10, 14 + 6 = 20). Knowing the meaning of the symbols ✦, **-**, and **=**.

Learning Theme Application:
The Activity: Balancing a utility belt. A hero's belt has a maximum capacity of 20 items. If they are carrying 12 smoke pellets, pupils must use their rapid recall of number bonds to calculate how many grappling hooks can fit (12 + ? = 20).

C. Measurement (Calibrating Gadgets)
The Substantive Base: Knowing standard units of measurement: centimetres (**cm**), metres (**m**), grams (**g**), and kilograms (**kg**). Knowing how to tell the time to the hour and half-hour.

Learning Theme Application:
The Activity: Measuring the flight range of different superhero gliders using a metre stick. Telling the time on the "Doom Clock" to know exactly when the villain's secret trap will activate (e.g., "The trap opens at half past 4").

D. Geometry: Shapes & Position (Designing Badges & Mazes)
The Substantive Base: Identifying and naming common 2D shapes (triangles, rectangles, pentagons) and 3D shapes (spheres, cubes, pyramids). Using positional language (left, right, clockwise, half-turn).

Learning Theme Application:
The Activity: Designing a secret emblem for a superhero shield using only shapes with fewer than 5 corners. Programming a "hero-bot" drone through an obstacle grid using precise directions: *"Forward 3 spaces, turn clockwise, forward 2."*

Substantive vs. Disciplinary: The Math Split
To keep the difference clear, consider how these two types of knowledge interact in a KS1 classroom:

Substantive Math Knowledge (The Facts)	Disciplinary Math Knowledge (The Strategy)

Knowing that **8 ✦ 2 = 10**.	**Using that fact** to quickly solve 18 + 2 = 20 or 80 + 20 = 100.
Knowing that a cylinder is a **3D shape with 2 flat circular faces**.	**Explaining why** a cylinder is the best shape for a superhero escape tunnel because it can roll.
Knowing that **cm** stands for centimetres.	**Deciding whether** centimetres or metres are better to measure the length of a giant laser wall.

Why Substantive Math Knowledge Matters in KS1

1. It Frees Up Working Memory (Reducing Cognitive Load)

If a child has to spend all their mental energy counting on their fingers to solve a simple addition like 5 + 3, they will have no mental space left to solve a complex, multi-step word problem. Securing substantive knowledge to the point of **automaticity** (quick, effortless recall) is like giving a superhero's brain a software upgrade—it frees up their processing power to tackle the harder, trickier parts of problem-solving.

2. It Prevents Math Anxiety

Children who struggle to recall basic facts often feel lost in math lessons, which rapidly leads to the belief that they "just aren't good at math." By systematically teaching and securing basic facts (like doubles, number bonds, and place value structures) using engaging, high-stakes superhero game formats, we build an early sense of mathematical competence and confidence.

3. It Is the Scaffold for Future Math

You cannot learn how to multiply (Year 2/3) if you cannot confidently count in steps of 2s, 5s, and 10s (Year 1). You cannot understand fractions (halves and quarters) if you do not understand how to share whole numbers into equal groups. Substantive knowledge acts as the structural steel of a building; if the foundations laid in Key Stage 1 are shaky, everything built on top of them in later years is at risk of collapsing.

Disciplinary Knowledge

In Key Stage 1 Mathematics, **disciplinary knowledge** is not the arithmetic facts themselves (like knowing that 5 + 5 = 10). Instead, it is the practice of **Mathematical Reasoning and Problem Solving**. It is learning *how* to think like a Mathematician: spotting patterns, making predictions, testing Mathematical rules, and proving how you arrived at an answer. When framed around a **'Superheroes'** learning theme, Mathematics transforms from an abstract page of sums into a series of critical rescue missions, gadget calibrations, and tactical operations. Children learn that Maths is a tool used by heroes to solve real-world problems.

Core Disciplinary Maths Knowledge: The 'Superhero' Framework

Under the National Curriculum, disciplinary Maths knowledge centres around three overarching aims: **Fluency** (applying rules quickly), **Reasoning** (explaining the "why"), and **Problem Solving** (applying Maths to unfamiliar puzzles). Here is how these skills are developed through the superhero theme:

A. Spotting Patterns and Relationships (Decoding the Villain's Trap)

The Disciplinary Skill: Recognising numerical or spatial patterns, identifying the rule behind them, and predicting what comes next.

Learning Theme Application:

The Puzzles: A villain locks a safe with a numerical laser grid that skips numbers: 2, 4, 6, 8,...
The Mathematical Thinking: Rather than just guessing the next number, pupils analyse the relationship between the digits. They deduce the rule (*"It is going up by 2 each time"*) to accurately predict the final override code (10, 12) and break the code.

B. Conjecturing and Proving (Testing Super-Gadgets)
The Disciplinary Skill: Making a Mathematical statement (a conjecture), testing it to see if it works, and using physical objects or drawings to *prove* it to someone else.

Learning Theme Application:
The Logic: A child makes a claim: *"My superhero needs an even number of gadgets so they can split them equally between two utility belts."*
The Proof: The teacher asks them to prove it. The child uses physical cubes (representing gadgets) to show that 7 cannot be shared equally without a leftover cube, but 8 can. They use concrete evidence to validate their Mathematical claim.

C. Working Systematically (Optimising the Rescue Route)
The Disciplinary Skill: Tackling a problem in an organised, step-by-step way to ensure you have found *all* possible answers, rather than just guessing randomly.

Learning Theme Application:
The Problem: A superhero has a red cape and a blue cape, alongside a gold suit and a silver suit. How many different uniform combinations can they wear?
The Systematic Approach: Instead of shouting out random guesses, children learn to pair them methodically:
1. Red Cape + Gold Suit
2. Red Cape + Silver Suit
3. Blue Cape + Gold Suit
4. Blue Cape + Silver Suit

This methodical thinking ensures no combinations are missed or duplicated.

D. Selecting Mathematical Tools and Representations (The Lab Dashboard)
The Disciplinary Skill: Deciding which Mathematical tool (e.g., a number line, a tens frame, a part-whole model, or counting blocks) is the most efficient way to solve a specific problem.

Learning Theme Application:
The Choice: A citizen needs 15 medical supplies, but the hero only has 7. How many more do they need to gather?
The Tool Application: Pupils learn to choose their Mathematical weapon. One child might use a tens frame to visualise "filling the gap to 10 and adding 5 more," while another uses a number line to count up from 7 to 15. They actively select the model that makes the Maths clear to them.

Substantive vs. Disciplinary: The Maths Split

Substantive Maths Knowledge (The Facts)	**Disciplinary Maths Knowledge (The Strategy)**
Knowing that **10 - 3 = 7**.	**Explaining the inverse relationship** to check an answer: *"I know 7 is right because 7 + 3 = 10."*

Knowing that a rectangle has **4 sides and 4 corners**.	**Sorting shapes** into a Venn diagram based on properties to determine which shields stack perfectly together.
Knowing how to read the number **45** on a ruler.	**Choosing the correct unit of measurement** (centimetres vs. metres) to measure the flight distance of a hero's glider.

Why Disciplinary Maths Knowledge Matters in KS1

1. It Eliminates the 'Fear of Being Wrong'

When Maths is taught purely as substantive facts, children often freeze because they are terrified of getting the "wrong answer." Disciplinary knowledge shifts the spotlight from the final number to the **journey taken to get there**. In a superhero scenario, discussing *how* a child tried to crack a code—even if they miscalculated a step—celebrates their logic, building a growth mindset and Mathematical resilience.

2. It Teaches Children to 'Talk Maths' (Mathematical Oracy)

Being able to calculate a sum silently is useful, but being able to explain *why* an answer makes sense is a higher-level cognitive skill. Disciplinary Maths forces children to use positional language and logical connectives (*"because," "therefore," "so"*). Saying, *"The villain's car is faster **because** it travelled 12 metres in 5 seconds, whereas the hero's car only travelled 8 metres,"* builds deep, conceptual understanding.

3. It Prepares Them for Real-World Problem Solving

Nobody in adult life is handed a worksheet of isolated calculations. Instead, we are handed complex, messy real-world problems that require us to select the right Maths tools, identify patterns, and work out a systematic solution. By teaching children how to reason Mathematically at age 5 to 7, we are building the fundamental logic engines they will need to decode the world around them for the rest of their lives.

Learning Objectives

Maths Objectives for Key Stage 1 in relation to the Learning Theme 'Superheroes'

1. Number and Place Value:

Objective: Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.
Superhero Link: Counting how many villains a superhero has captured, counting the number of heroic deeds, counting up to 100 on a "power meter."

Objective: Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.
Superhero Link: Counting superhero capes (pairs of twos), counting the number of fingers on groups of alien villains (fives), counting groups of ten superhero gadgets.

Objective: Given a number, identify one more and one less.
Superhero Link: "If Superhero Sparkle has 8 superpowers, and gains one more, how many now?" or "If there were 12 villains and one was captured, how many are left?"

Objective: Identify and represent numbers using objects and pictorial representations, including the number line, and use the language of: equal to, more than, less than (fewer), most, least.
Superhero Link: Comparing the number of gadgets different superheroes have (e.g., "Superhero Max has more gadgets than Captain Courageous"), ordering villains by their "danger level" on a number line.

2. Addition and Subtraction:
Objective: Read, write and interpret Mathematical statements involving addition (+), subtraction (–) and equals (=) signs.
Superhero Link: Writing number sentences to represent superpowers combining: "3 flying powers + 2 super strength powers = 5 powers."

Objective: Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems.
Superhero Link: "Super-team Gamma had 7 members, then 3 more joined. How many altogether?" (using superhero cut-outs). "There were 10 evil robots, but 6 were defeated. How many are left?"

Objective: Represent and use number bonds and related subtraction facts within 20.
Superhero Link: If a superhero's mission needs 20 points to succeed, and they have 13, how many more do they need? (20 = 13 + ?).

3. Multiplication and Division:
Objective: Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
Superhero Link: "There are 3 superhero teams, and each team has 4 members. How many superheroes altogether?" (multiplication). "We have 15 power-up potions to share equally among 5 superheroes. How many potions does each get?" (division through sharing).

4. Fractions:
Objective: Recognise, find and name a half as one of two equal parts of an object, shape or quantity.
Superhero Link: Sharing a superhero symbol in half, dividing a 'power bar' into half.

Objective: Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.
Superhero Link: Cutting a superhero's shield into quarters, sharing a pizza among four superheroes.

5. Measurement:
Objective: Compare, describe and solve practical problems for lengths and heights [e.g., long/short, longer/shorter, tall/short, double/half], mass/weight [e.g., heavy/light, heavier than, lighter than], capacity and volume [e.g., full/empty, more than, less than, half, half full, quarter], time [e.g., quicker, slower, earlier, later].
Superhero Link:
Length/Height: Measuring the height of different superheroes (using cut-outs); comparing the length of superhero capes.
Mass/Weight: Weighing different 'super tools' or 'kryptonite' (actual objects or painted pebbles); discussing a villain's 'heavy' plans.
Capacity/Volume: Filling superhero potion bottles; comparing the volume of different villain's 'lairs' (using boxes).
Time: Timing how long it takes a superhero to complete a mission; sequencing events in a superhero's day; telling the time for a 'superhero meeting' (e.g., "at half past 3, the superhero meeting begins").

Objective: Measure and begin to record lengths and heights, mass/weight, capacity and volume, time (hours, minutes, seconds).
Superhero Link: Recording how far a superhero figure can "fly"; timing how long it takes to solve a 'super-

problem'.

Objective: Recognise and know the value of different denominations of coins and notes.
Superhero Link: Role-playing buying superhero gadgets or costumes in a 'super-shop'; calculating the cost of materials to build a superhero headquarters.

6. Geometry: Properties of Shapes:
Objective: Recognise and name common 2-D and 3-D shapes, including: 2-D shapes [e.g., rectangles (including squares), circles and triangles], 3-D shapes [e.g., cuboids (including cubes), pyramids and spheres].
Superhero Link: Identifying circular superhero shields, rectangular buildings, triangular roofs on superhero headquarters, or cuboid 'safe' vaults. Designing superhero logos using different 2D shapes.

Objective: Identify 2-D shapes on the surface of 3-D shapes.
Superhero Link: Looking at models of superhero bases (cuboids with rectangular faces), or villain's pyramids (triangular faces).

7. Geometry: Position and Direction:
Objective: Describe position, direction and movement, including whole, half, quarter and three-quarter turns.
Superhero Link: Giving directions to find a hidden villain on a map; describing the flight path of a superhero; using turns to navigate a 'superhero training course'.

8. Statistics (Year 2 focus primarily):
Objective: Interpret and construct simple pictograms, tally charts, block diagrams and tables.
Superhero Link: Creating tally charts to record the number of different superpowers; drawing pictograms to show favourite superheroes or villains; creating a block diagram of the number of missions completed by different superhero teams.

Objective: Ask and answer questions by counting the number of objects in each category and sorting the categories by quantity.
Superhero Link: "Which superpower is the most common?" "How many more gadgets does Hero A have than Hero B?"

Lesson Ideas

This 6-week Medium-Term Plan for Key Stage 1 Mathematics is built around the **'Superheroes Academy'** learning theme. The mathematical tasks are designed as "academy challenges," where children must secure mathematical facts (**substantive knowledge**) and use logic, reasoning, and systematic thinking (**disciplinary knowledge**) to earn their superhero badges.

Theme: Superhero Academy: Mission Control Math
Duration: 6 Weeks (approx. 5 hours per week)
Core Project: Calibrating gadget stats, cracking villain lock codes, and mapping defensive laser grids.

The 6-Week Mathematics Scheme

WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
Place Value Codes	Gadget Number Bonds	Super-Speed Sharing	Measuring Flight	Shield Geometry	Robo-Drone Navigation

Tens & Ones to 50	Target Capacity (20)	Halving & Doubling	m/cm Glider Tests	2D/3D Shield Design	Positional Turns

Week 1: Cracking the Secret Codes (Number & Place Value)
Substantive Knowledge (The 'What'):
Know how to count, read, and write numbers to 50 in numerals.
Understand that two-digit numbers are made of **tens and ones** (place value).
Identify "one more" and "one less" than any given number on a 100-square.
Disciplinary Knowledge (The 'How'):
Representing: Use concrete base-10 equipment (Dienes blocks) to physically build and prove a code number.
Reasoning: Explain why 34 is larger than 28 by looking at the tens column (*"34 has 3 tens, but 28 only has 2 tens"*).
The Mission: *The Vault Override.* The villain has locked the city's power grid. Pupils use base-10 blocks to represent the secret 2-digit numbers given in "clue cards" (e.g., "The code has 4 tens and 2 ones. What is the code?") to unlock the vault.

Week 2: Balancing the Utility Belt (Addition & Subtraction)
Substantive Knowledge (The 'What'):
Recall and use addition and subtraction facts (number bonds) to 10 and 20.
Understand the relationship between addition and subtraction as inverse operations (e.g., if 15 + 5 = 20, then 20 - 5 = 15).
Disciplinary Knowledge (The 'How'):
Selecting Tools: Choose between using a tens frame, a part-whole model, or a number line to solve a missing-number problem quickly.
Systematic Thinking: Work methodically to find all the different ways to make 10 or 20 using two types of gadgets.
The Mission: *Equipping the Hero.* A hero's utility belt can hold exactly 20 items. If they have 14 smoke pellets, how many grapple hooks can they fit? Pupils use part-whole models to prove their calculations and systematic pairing to find all gear combinations.

Week 3: Doubling the Power (Multiplication, Division & Fractions)
Substantive Knowledge (The 'What'):
Count in steps of 2s, 5s, and 10s.
Understand that **doubling** is adding the same number to itself (or multiplying by 2) and **halving** is splitting a group into two equal parts.
Disciplinary Knowledge (The 'How'):
Conjecturing & Proving: Test the claim: *"You can only halve an even number of sidekicks fairly."* Use physical counters to prove or disprove this statement.
The Mission: *The Cloning Machine.* A villain has sent clones! Pupils must double their superhero numbers to match the threat. They practice doubling small numbers of counters and halving supplies to distribute "energy packs" equally among a team of sidekicks.

Week 4: Calibrating the Gliders (Measurement)
Substantive Knowledge (The 'What'):
Know that centimetres (**cm**) and metres (**m**) are standard units of length.
Understand how to align a ruler or metre stick starting precisely at 0 to get an accurate reading.

Disciplinary Knowledge (The 'How'):
Estimating: Estimate the length of a flight path before measuring, refining their estimates based on previous results.
Comparing: Use inequality symbols (<, >, =) to mathematically compare the flight distances of different aircraft.
The Mission: *Glider Trials.* Pupils fold simple paper "super-gliders." They throw them in the hall and measure the flight distances using metre sticks and tape measures, recording the stats in a class leader board table.

Week 5: Designing the High-Tech Shield (Geometry: Properties of Shapes)
Substantive Knowledge (The 'What'):
Identify and name common 2D shapes (triangles, circles, rectangles, pentagons) and 3D shapes (spheres, cubes, cylinders).
Know the properties of shapes: count the number of **sides and vertices (corners)** on 2D shapes, and **faces** on 3D shapes.
Disciplinary Knowledge (The 'How'):
Classifying: Sort 2D and 3D shapes into Venn or Carroll diagrams based on geometric properties, rather than colour or size.
The Mission: *The Defensive Shield Lab.* The tech department needs a new shield design. The shield must be made of shapes that have *more than 3 sides but fewer than 6 corners.* Pupils select, name, and fit flat shapes together to construct their geometric defence emblem.

Week 6: Programming the Hero-Bot (Geometry: Position & Direction)
Substantive Knowledge (The 'What'):
Understand and use mathematical vocabulary for direction: **forwards, backwards, left, right, clockwise, counter-clockwise**.
Describe movements using fractions of turns: **quarter turn, half turn, three-quarter turn, whole turn**.
Disciplinary Knowledge (The 'How'):
Algorithmic Thinking: Write a step-by-step sequence of instructions (a path program) to navigate a grid without hitting obstacles.
Debugging: Find and correct the error in a path program when a hero-bot crashes into a "laser barrier."
The Mission: *The Secret Base Maze.* On a large floor grid, pupils must program a toy programmable robot (or a blindfolded classmate acting as a "hero-bot") to navigate through a grid of obstacles to reach the capture zone. They write and execute code chains: e.g., Forwards 2 steps → Quarter-turn clockwise → Forwards 1 step.

Assessment Indicators (Mathematics)
Use these observational targets throughout the 6-week unit to measure pupil progress:

Developing (Working Toward)	Secure (Expected Standard)	Greater Depth (Exceeding)
Can read and write numbers to 20. Adds and subtracts using physical objects but relies on counting from 1.	**Partition two-digit numbers into tens and ones.** **Recalls number bonds to 10 and 20.** **Measures objects accurately**	Employs inverse operations to self-check calculations. Works systematically to find all solutions to a combination puzzle.

Developing (Working Toward)	Secure (Expected Standard)	Greater Depth (Exceeding)
Names basic shapes but confuses properties (e.g. calling vertices 'corners').	**in cm.** **Names properties of 2D/3D shapes.** **Describes turns clearly.**	Explains why a shape does or doesn't belong to a mathematical category.

Other Information, Ideas and Resources

Number and Place Value:

Counting the Crew: Have children count the number of superheroes in a team, villains they've defeated, or gadgets on a utility belt.

Superhero Line-Up: Arrange superhero figures in order of height, number of powers, or the year they were "created" (if you have that information). This introduces ordinal numbers (first, second, third).

Secret Headquarters Numbering: Use house numbers or create pretend headquarters with numbered doors. Ask questions like, "The Flash lives at number 7, and Wonder Woman lives two doors down. What number is her headquarters?"

Collecting Power Tokens: Give each child a set of tokens (e.g., bottle caps, counters). They earn tokens for "defeating" mini-challenges and then count their total. You can even introduce place value by having different coloured tokens represent ones and tens.

Addition and Subtraction:

Villain Vanquishing: Start with a number of villains (e.g., 5). Each time a superhero "defeats" one, subtract 1. "There were 5 robots attacking, Supergirl defeated 2. How many are left?"

Combining Forces: Have two groups of superheroes join together. "Batman has 3 sidekicks, and Robin brings 2 more. How many are there in total?"

Sharing the Spoils: Superheroes find a treasure of coins (counters). They need to share them equally. This can introduce the concept of division informally.

Power-Up Boost: A superhero has a power level of 4. They get a power-up that adds 3 more. What's their new power level?

Energy Drain: A superhero starts with an energy level of 9, but using their powers drains 4 energy points. What's their energy level now?

Multiplication and Division (Early Stages):

Superhero Teams: Have groups of the same number of superheroes. "There are 3 teams of 2 superheroes. How many superheroes are there altogether?" (Early multiplication as repeated addition).

Sharing Gadgets: "Captain America has 6 shields and wants to give 2 to each of his friends. How many friends can he give shields to?" (Early division as sharing).

Measurement:

Superhero Height Chart: Measure the height of the children and compare them to the (imagined) heights of superheroes. Who is taller? Shorter?
Super Speed Distance: Create a simple track and measure how far different "superheroes" (children pretending) can run or jump. Compare distances using terms like "longer than," "shorter than."

Timing the Mission: Use a simple timer to see how long it takes to complete a "superhero training course." Introduce the concept of time (seconds, minutes).
Building the Fortress: Use building blocks to construct a superhero fortress. Compare the lengths and heights of different parts of the fortress.

Shape and Space:
Identifying Superhero Symbols: Focus on the shapes within superhero logos (circles for Wonder Woman, stars for Captain America, triangles, squares).

Mapping the City: Create a simple map of a city where superheroes operate. Use positional language (next to, behind, in front of) to describe locations. "The Batcave is behind the library."
Building 3D Gadgets: Use construction materials (e.g., LEGO, blocks) to build 3D superhero gadgets like vehicles or communicators. Identify the 3D shapes used (cubes, cuboids, cones).

Symmetry in Masks: Discuss how many superhero masks are symmetrical. Draw half a mask and ask children to complete the other symmetrical half.

Data Handling:
Favourite Superheroes: Conduct a simple survey to find out everyone's favourite superhero. Create a tally chart and a simple bar graph to represent the data.

Superhero Powers: List different superhero powers and ask children to choose their favourite. Create a pictogram where each picture represents one vote.

Considerations for Implementation

Role-Playing: Encourage children to take on the roles of superheroes during the activities.
Themed Resources: Use superhero-themed stickers, cut-outs, or drawings to make the activities visually appealing.
Storytelling: Frame Maths problems within exciting superhero narratives.
Problem-Solving Missions: Present Maths challenges as "missions" that the superheroes need to complete to save the day.

Courageous Advocacy

Courageous advocacy ideas, based around the Learning Theme of '**Superheroes'** focusing on simple, relatable actions they can take:

Focusing on Fairness and Helping Others:
'Super Friend to the Rescue': Discuss how superheroes help people who are in trouble or being treated unfairly. Encourage children to be "super friends" by looking out for classmates who are lonely, being left out, or need help with a task. This could involve sharing toys, inviting someone to play, or telling a grown-up if they see someone being unkind.

'The Power of Sharing': Many superheroes share their powers or resources to defeat villains. Talk about

the importance of sharing their own things (toys, pencils, ideas) and how it can make others happy and solve problems. They could create posters about the "power of sharing" for their classroom.

'Standing Up for What's Right (Even When It's Small)': Superheroes often stand up against bullies or injustice. Discuss small, age-appropriate scenarios where they can stand up for what's right, like reminding a friend to take turns or saying "no thank you" if someone tries to take their things without asking.

Focusing on Protecting the Planet:
'Eco-Warriors': Many superheroes protect the Earth. Discuss simple ways they can be "eco-warriors" by saving energy (turning off lights), recycling, and looking after their school environment (not littering). They could design their own "eco-warrior" costumes and create posters about helping the planet.

'Water Heroes': Talk about how important water is and how some superheroes might protect water sources. Encourage them to be "water heroes" by not wasting water when washing their hands or brushing their teeth. They could create drawings of superheroes protecting rivers and oceans.

Focusing on Using Their Voices:
'My Hero Voice': Superheroes often use their voices to speak up and make a difference. Encourage children to use their "hero voices" to ask for help when they need it, share their ideas in class, or tell a grown-up if something isn't right. They could practice using their "hero voices" in role-playing scenarios.

'Making Our School Better': Discuss how superheroes try to make their city a better place. Brainstorm simple ways the children could make their school a better place, like suggesting new playground games, asking for more books in the library, or helping to keep the classroom tidy. They could draw pictures or write simple sentences about their ideas.

Activity Ideas:
Superhero Role-Play: Set up scenarios where children can act out being courageous advocates, helping others, or protecting the environment.

Creating Superhero Badges and Posters: They can design their own superhero logos and create posters promoting their chosen act of courageous advocacy.

Storytelling and Drawing: Encourage them to create stories and drawings about superheroes who show courage by helping others or standing up for what they believe in.

Class Discussions: Facilitate discussions about what it means to be brave and how even small actions can make a big difference.

Connecting to Real-Life Heroes: Talk about real-life heroes in their community (e.g., firefighters, nurses, community volunteers) who show courage and help others.

Supporting charities that help others from Children in Need, Cancer Research UK, The Heart Foundation, Diabetes UK, RSPCA. Children can select charities that are more meaningful to them and their community.

Key Considerations for Implementation:
Keep it Simple and Concrete: Focus on actions that are easy for KS1 pupils to understand and carry out.
Make it Relatable: Connect the ideas to their own experiences and the school environment.

Focus on Positive Actions: Frame courageous advocacy as doing good and helping others.
Celebrate Small Achievements: Acknowledge and praise their efforts, no matter how small.

Developing Spirituality

Superheroes already capture their imaginations, and we can use that to gently introduce some deeper ideas. Here are some spiritual ideas linked to '**Superheroes'** learning theme:

Focusing on Inner Qualities (Beyond the Powers):
Inner Strength and Resilience: Discuss how superheroes face challenges and don't give up. Connect this to the children's own resilience when things are tough. Ask: "What makes a superhero strong even when they don't use their powers? How can *you* be strong inside when things are difficult?"
Kindness and Compassion: Many superheroes are driven by a desire to help others. Explore stories where a superhero shows kindness, even to a villain. Ask: "Why is it important for superheroes to be kind? How can we be superheroes of kindness in our classroom and at home?"

Courage and Bravery: Superheroes often face their fears to do what's right. Talk about different kinds of courage – not just physical bravery, but also speaking up for someone or trying something new. Ask: "What does it mean to be brave like a superhero? When have you been brave, even if you were a little scared?"

Justice and Fairness: Superheroes fight for what is right. Discuss scenarios where things aren't fair and how a superhero might respond. Ask: "Why do superheroes care about justice? How can we make sure things are fair for everyone?"

Hope and Inspiration: Superheroes often inspire others and give them hope. Talk about how their actions can make a difference. Ask: "How do superheroes make people feel hopeful? Who inspires *you* and makes you feel like you can do great things?"

Exploring Deeper Concepts Through Superhero Actions:
Making a Difference: Discuss how even small actions can have a big impact, just like a superhero's intervention. Ask: "Even if we don't have superpowers, how can we make a positive difference in the world around us?"

Helping Those in Need: Superheroes are often motivated by helping those who are vulnerable. Discuss ways the children can help others in their community. Ask: "Who do superheroes help? How can we be helpful to people in our school or neighbourhood?"

The Importance of Teamwork: Many superhero teams work together to achieve a common goal. Discuss the strengths of collaboration. Ask: "Why is it important for superheroes to work as a team? When have you worked well with others to achieve something?"

Taking Responsibility: Superheroes often take responsibility for their actions and the consequences. Discuss the importance of owning up to mistakes. Ask: "What does it mean for a superhero to be responsible? How can we show responsibility in our own lives?"

Creative Activities to Encourage Reflection:
'My Inner Superhero' Activity: Ask children to draw their own inner superhero, focusing on the qualities they admire (kindness, bravery, helpfulness) rather than just physical powers.

Superhero Role-Play with a Spiritual Focus: Create scenarios where children can role-play being superheroes who solve problems with kindness, courage, and fairness.

Creating 'Hope Shields': Children can design shields that represent what gives them hope and strength, drawing inspiration from superhero symbols.

Superhero Story Writing with a Moral: Encourage children to write their own superhero stories that focus on a specific spiritual theme like forgiveness or compassion.
Reflective Questions After Superhero Stories: After reading a superhero story, ask open-ended questions that encourage reflection on the characters' motivations and actions.
Important Considerations for Implementation:
Keep it Simple and Concrete: Use language that is easy for KS1 pupils to understand. Focus on tangible actions and feelings.
Use Stories and Visuals: Superhero stories and images are powerful tools for engagement.
Connect to Their Own Experiences: Help children see how these spiritual qualities relate to their own lives and relationships.
Focus on Positive Values: Emphasise the positive aspects of superheroism and their potential for good.
Be Inclusive: Acknowledge that not all superheroes have the same powers or look the same, promoting inclusivity and celebrating differences.

Other Ideas

Here are some extra-curricular ideas for Key Stage 1 pupils relating to the learning theme **'Superheroes'**, designed to be fun, engaging, and link to various aspects of development:

1. Superhero Training Academy:
What it is: A physical club focused on developing 'super skills'.
Activities:
Agility Course: Set up cones, hurdles (small, safe ones!), and tunnels for children to navigate.
Strength Training (Age-Appropriate): Simple exercises like star jumps, push-ups against a wall, 'superhero poses'.
Target Practice: Throwing soft balls at targets (villain pictures, numbers for scoring).
Balance Beam Challenges: Walking heel-to-toe on a line or low beam.
Listening Skills: 'Super hearing' games where children identify sounds.
Teamwork Challenges: Group tasks that require collaboration (e.g., moving an object without touching it, building a tower together).
2. Secret Headquarters/Superhero Lair Design & Build:
What it is: A creative club focused on design, construction, and imaginative play.
Activities:
Junk Modelling: Using cardboard boxes, tubes, plastic bottles, and other recycled materials to build mini headquarters, gadgets, or vehicles.
Blueprint Drawing: Designing their lair or gadget before building it.
Decorating: Painting, drawing, and adding details to their creations.
Feature Planning: Discussing what essential rooms or features a superhero HQ needs (e.g., power charging station, communication room, gadget lab).

3. 'Heroes of Kindness' / 'Community Champions' Club:

What it is: A club that focuses on the core superhero value of helping others and making a positive impact.
Activities:
'Random Acts of Kindness' Missions: Brainstorming and carrying out small acts of kindness around school (e.g., leaving a kind note for a cleaner, helping tidy a classroom).
Thank You Card Creation: Making cards for school staff or local community helpers (firefighters, police, doctors).
'Super-Clean Up': Mini litter picks around the school grounds (with gloves and supervision).
Collecting for a Cause: Organising a small collection for a local charity (e.g., non-perishable food, old books for a book drive).
Designing 'Thank You' Posters: For people who help their community.

4. Superhero Story & Performance Club:
What it is: A club focused on developing literacy and expressive arts skills through storytelling.
Activities:
Creating Original Superhero Stories: Children develop their own superhero and villain, writing simple plots.
Puppet Shows: Making superhero puppets and performing short plays.
Comic Strip Creation: Drawing and writing simple comic strips about superhero adventures.
Role-Play Scenarios: Acting out different 'missions' or 'villain encounters'.
Superhero Songs & Rhymes: Learning or creating songs about bravery and helping.

5. Costume & Gadget Workshop:
What it is: A hands-on club for designing and making superhero costumes and props.
Activities:
Cape Design & Decoration: Using fabric scraps, felt, glitter glue, and fabric pens to decorate capes.
Mask Making: Using card, elastic, and decorative materials.
Accessory Creation: Making cuffs, belts, or headbands.
Gadget Construction: Simple gadgets from cardboard, tin foil, bottle tops (e.g., wrist communicators, power gloves).
Superhero Symbol Design: Creating and decorating their personal superhero emblem.

6. 'Problem Solvers' / 'Super Sleuths' Club:
What it is: A club focused on developing critical thinking and problem-solving skills.
Activities:
Riddles & Puzzles: Solving age-appropriate logic puzzles or riddles related to 'villain plots'.
Code Breaking: Simple cipher wheels or substitution codes.
'Mystery Missions': Setting up small, safe 'mystery' scenarios for children to solve using clues.
Maze Navigation: Solving printed mazes or creating human mazes.
Sequencing Challenges: Putting events of a superhero story in order.

Tips for Implementation:
Emphasise Core Values: Always reinforce the positive traits of superheroes like kindness, bravery, teamwork, and helping others.
Child-Led Elements: Allow children to have input into what they do, fostering ownership and engagement.
Safety First: Ensure all activities are safe and age-appropriate, especially for any physical challenges or

craft activities with tools.
Showcase Learning: Have a 'Superhero Celebration' where children can show off their costumes, gadgets, stories, or demonstrate their 'super skills'.
Community Links: If possible, invite a local 'hero' (e.g., police officer, firefighter) to talk about how they help the community.
Connect to Books/Media: Refer to popular superhero stories and characters to inspire activities.

Other Ideas:
PSHCE – Safe strangers

To agree on class rules

To know we are all different and to accept those differences

To identify own and others feelings.

Care for the local environment, keeping it safe
To know how to keep healthy and safe around medicines

Visit to a Drs/dentist/police station/fire station/supermarket

Community Heroes
https://classroom.thenational.academy/lessons/community-heroes-c4w3cr?from_query=heroes
Local Heroes
https://classroom.thenational.academy/lessons/local-heroes-cmw66c?from_query=heroes
Lockdown Heroes
https://classroom.thenational.academy/lessons/lockdown-heroes-c4rk2c?from_query=heroes
Nurturing Nurses
https://www.bbc.co.uk/teach/class-clips-video/ks1-topic-resources-nurturing-nurses-index/z7hf3j6