

Spare: Spinning Superhero



Activity Structure – 45min

Activity	Timing
Warm up Game	5 mins
Introduce Story and Project	10 mins
Main Activity	25 mins
Final test & debug	throughout
Share with group	5 mins

Overview

Create an exciting opening animation for a superhero TV show.

Learning Objectives:

- To make a character do two or more things at once.
- To use the Scratchjr Paint Editor to draw or edit a character.

National Curriculum / EYFS Curriculum Links

Understanding the World Technology:

- Completes a simple program on a computer.

Warm up game: Code Cards Hide & Seek

- Hide the flashcards around the room.
- Challenge the children to look for a specific types of code block. E.g. *Can you find a looks block? Can you find a motion block? Can you find a trigger block? Can you find a control block? Etc.*
- If your class are a bit lively the children could take it in turns or work in a pair to find the flashcards.
- Discuss what each of the blocks does. Offer lots of praise and encouragement, especially if the children have a guess for a code block they haven't used yet.

Introduction (discuss the project together, share ideas and create excitement)

- *Have you ever watched a superhero TV show? How do they normally start? Is there a song or some music at the start? This week we're going to have a go at making our own opening sequence for a superhero tv show.*
- Watch the project. *Carefully watch my superhero character. Which blocks do you think I have used for page 1?*
- Point out that the character spins, gets bigger and plays the theme tune music at the same time. *How do you think I made my superhero character do three things at once?*
- Show the children the code. Point out that you have used three green flag blocks, and that each line of code/script controls a different thing, and that by using the same trigger/start block we are able to make them happen at the same time.
- *Does anyone remember how we switch screens? If needed, recap how the 'Go to Page...' block works.*
- *Let's look at the animation on page 2. What will your superhero's power be? Superpowers that work well in Scratchjr include: Super jump, invisible, grow, fly, strength (could animate lifting a car), speed, jumping between buildings, etc.*

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Main Activity Key questions and teaching

1. Give your project two pages. Create a single colour background for page 1.
2. Select a person from the character library. Use the Paint Editor tools to edit them to look like a superhero. Children can add a cape, a mask or an 'S' to the T-Shirt.
3. To add a cape, use the drag/arrow tool to move the superhero to one side then draw the cape freehand or with the triangle tool. Use the drag/arrow tool to position the superhero in front of the cape.
4. *Which direction will your superhero turn in? Will you add a speed block?* [Start on Green Flag, Fast, Turn left 1, Repeat Forever]
5. Use the 'shrink' block to make your superhero very small.
6. Add in some code to make your superhero grow while they are spinning: [Start on Green Flag, Grow 1, Repeat forever].
7. *Now let's record a superhero theme tune What could we sing or hum?* If children are feeling shy they could record this with a friend or as a group.
8. *Which blocks will I need to use? Will it be similar to the two lines of code/script I've already made?* [Start on Green Flag, Play Recorded Sound, Go to Page 2].
9. *Let's test your project out. Do you think you need to add a wait block between your theme tune and the page switch? Will you use the loop block to repeat the theme tune?*
10. Once the children are satisfied with page 1 move onto creating Page 2. Choose a new background using the Scratchjr library. We've used a street one.
11. Select and position your superhero character.
12. Have a discussion with the children about what their superhero's power could be, and how they could code it? *What will her superpower be? Jumping really high? Running really fast, flying? What could we make her do on page 2? Which code blocks would we need to use?*
13. Support the children to create a simple animation which demonstrates their superhero's power.
14. Optional extra for early finishers: add some sound effects or narrative to page 2.

Teaching points

- Have the flashcards for the code blocks you will use on display for the children to refer to.
- Encourage the children to test and debug throughout.
- Encourage your more experienced coders to be ambitious in their ideas for page 2.

Possible Extensions

- Have three pages instead of two:
- Page 2: this could continue the opening sequence, but with the superhero spinning in the opposite direction and a different theme tune.
- Page 3: create an animation which features two superheroes. Children could coordinate the action between them with message blocks, or have one superhero trigger another one using the 'on bump' block.

Finishing up

- Share the projects. *What was the most challenging part of this project? How did you overcome it?*
- Give lots of targeted praise for the finished projects.

To Simplify

- Only make page 1.
- Do any editing of the main character for the child, or don't edit the character.