

Kit's Coding Challenge: Scratch Logic

Learning objective: To understand and apply the sequence of Scratch blocks to create a simple movement algorithm.

Kit the Fox is trying to program a sprite to navigate a maze. Look at the sequence of blocks below. Your task is to reorder the instructions so the sprite completes the movement correctly, then answer the questions to explain how the code works.

Word bank: Motion · Algorithm · Sprite · Event · Loop

1. Put these steps in the correct order for the sprite to move forward 10 steps, turn right 90 degrees, and say 'Hello!': 1. Turn right 90 degrees, 2. Move 10 steps, 3. Say 'Hello!', 4. When green flag clicked. (2 marks)

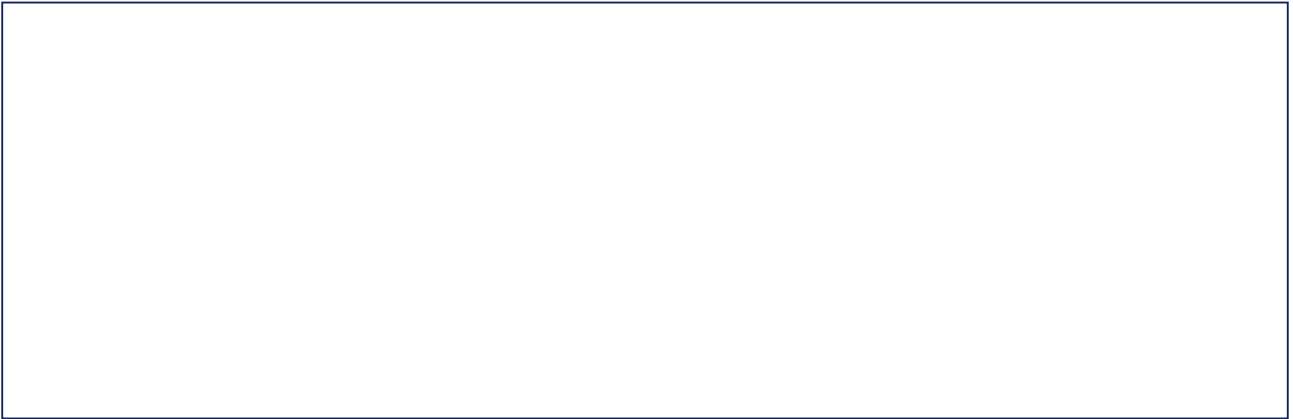
2. Why do we use an 'Event' block like 'When green flag clicked' at the very start of our code? (2 marks)

3. If Kit wants the sprite to move forward 10 steps five times, which type of block should he use to make the code shorter? (1 mark)

4. Explain what happens if you put the 'Say Hello' block inside a 'Forever' loop. (2 marks)

5. In Scratch, what is the name for the character or object that you are giving instructions to? (1 mark)

Draw: Draw a Scratch-style sprite (a simple cat or character) standing on a grid. Draw an arrow showing the path it needs to take to reach a golden star on the other side of the grid.



Extension challenge: Imagine you have a block called 'Jump'. Write down a sequence of 4 blocks that would make your sprite jump over a small obstacle in the maze.