

Kit's Coding Challenge: Mastering Scratch

Learning objective: To test understanding of block-based programming concepts, including sprites, sequences, loops, and debugging within the Scratch environment.

Help Kit the fox get his code running perfectly! Read each question carefully and choose the best answer. Good luck, young coders!

Answer Key: 1.C, 2.True, 3.False, 4.A, 5.Algorithm, 6.B, 7.True, 8.Loop, 9.C, 10.Debug. Explanation: A sprite is the character on the stage. An algorithm is a set of instructions. A loop repeats actions. Debugging is fixing errors in code.

Word bank: Sprite · Algorithm · Loop · Debug · Stage · Motion · Event · Sequence

1. **1. What do we call the main character or object that you program in Scratch? A) A script, B) A backdrop, C) A sprite*, D) A block (1 mark)**

2. **2. True or False: A 'sequence' is the order in which code blocks are placed to perform a task. (1 mark)**

3. **3. True or False: You can only use one script for a single sprite. (1 mark)**

4. **4. Which block category would you use to make a sprite turn 15 degrees? A) Motion*, B) Sound, C) Looks, D) Events (1 mark)**

5. **5. What is the name for a precise set of instructions used to solve a problem or complete a task? (1 mark)**

6. **6. Which block is used to start a sequence when the green flag is clicked? A) A motion block, B) An event block*, C) A sound block, D) A variable block (1 mark)**

7. **7. True or False: A 'loop' block allows a set of instructions to repeat multiple times. (1 mark)**

8. **8. What is the missing word? If your code has an error and doesn't work as expected, you need to _____ it. (1 mark)**

9. 9. If you want your sprite to play a 'meow' sound, which category do you look in? A) Control, B) Sensing, C) Sound*, D) Operators (1 mark)

10. 10. What do we call the white area where your sprite moves and performs the code? A) The workspace, B) The sprite library, C) The stage*, D) The script area (1 mark)

Draw: Draw a picture of Kit the fox sitting at a computer, designing a colorful game on the screen where a sprite is chasing a star.



Extension challenge: Challenge: If a sprite needs to walk across the stage, turn around, and walk back, write down the names of the blocks you would use in your sequence.