

Kit's Code Detective Mission

Learning objective: To identify and correct simple errors (bugs) in a set of instructions.

Kit the fox has written a set of instructions to help a robot move across a grid to collect a shiny acorn. Oh no! There are some mistakes. Read the code below. Circle the 'bug' in each sequence, then write the correct instruction in the space provided.

Word bank: Debug · Bug · Algorithm · Instruction · Correct

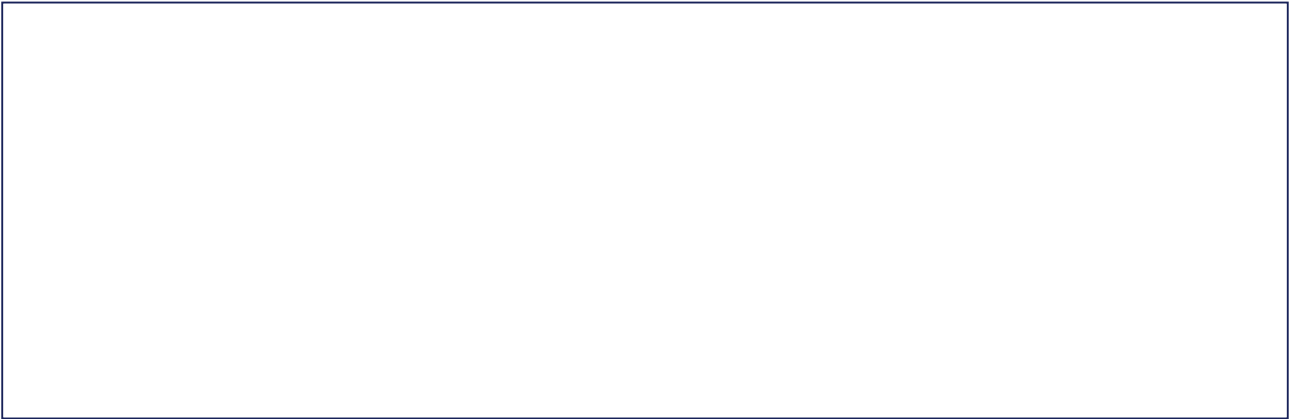
1. 1. The robot needs to move forward 3 squares to reach the acorn. The current code is: 'Move forward, Move forward, Turn left'. Where is the bug? What should the last step be? (2 marks)

2. 2. To pick up the acorn, the robot must be on the correct square. The code says: 'Move forward, Pick up object, Move forward'. If the acorn is on the first square, what is the bug? How do you fix it? (2 marks)

3. 3. A 'bug' is a mistake in a computer program. If your code does not work, what is the first thing you should do to fix it? (2 marks)

4. 4. Write a new, correct instruction to tell the robot to 'Turn right' and then 'Move forward one square'. (2 marks)

Draw: Draw a picture of Kit the fox using a magnifying glass to look at a computer screen to find a tiny, colourful bug hiding in the code.



Extension challenge: Can you write your own set of 3 instructions for a friend to follow to get from their desk to the classroom door? If they make a mistake, help them 'debug' their path!