

Computing Assessment: Finding and Fixing Bugs

Learning objective: To identify, explain, and correct errors in a sequence of instructions (algorithms).

Hello! Kit the fox needs your help. Look at the steps below. Read them carefully. If a step is wrong, fix it! Use the word bank to help you.

Kit the fox is writing a set of instructions to make a sandwich. Here is the plan: 1. Get the bread. 2. Put the jam on the plate. 3. Put the jam on the bread. 4. Close the sandwich. 5. Eat the sandwich.

Word bank: bug · debug · algorithm · sequence · error · code

1. What do we call a mistake in a set of instructions? (1 mark)

2. Look at Kit's plan. There is a mistake. Which step is confusing? Explain why. (3 marks)

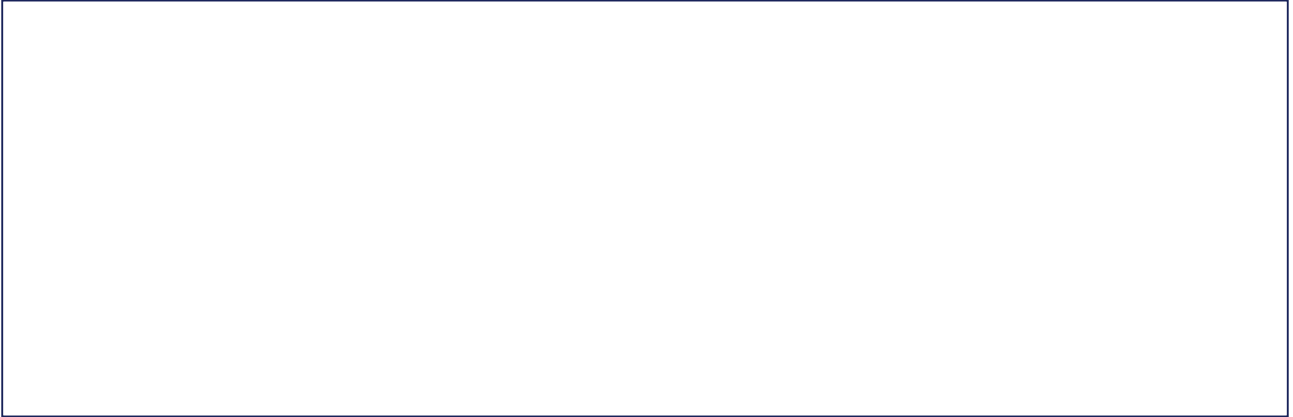
3. Write the correct order for the steps. Use the numbers 1 to 5. (5 marks)

4. What is the special word for finding and fixing a mistake in a computer program? (2 marks)

5. If you follow instructions in the wrong order, what happens to the final result? Use a sentence starter: 'If the order is wrong, then...' (4 marks)

6. Imagine you are teaching a robot to brush its teeth. Write 5 simple steps. Make sure they are in the right order. (5 marks)

Draw: Draw a picture of Kit the fox holding a magnifying glass, looking for a 'bug' hidden in some computer code.



Extension challenge: Total: /25. Challenge: Why is it important for computers to follow a precise sequence? Write one sentence.