

Kit's Code-Breaking Challenge: The Debugging Diary

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

Hello! Kit the fox has written some instructions for a computer game, but there are mistakes! Use this diary to help Kit fix the bugs. Read the instructions carefully, find the error, and write the correct steps.

Word bank: Algorithm · Bug · Debug · Error · Sequence · Fix · Step

1. What is the 'bug'? Write down the part of the instruction that is wrong. (2 marks)

2. Why do you think this part is an error? Explain what the computer would do wrong. (2 marks)

3. How can you fix it? Write the correct instruction here. (2 marks)

4. Now that you have debugged it, what will the computer do now? (2 marks)

Extension challenge: Can you write a new, short algorithm for Kit to make a cup of tea? Make sure all your steps are in the correct order!