

Kit's Code-Cracking Logbook

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

Help Kit the fox fix his broken computer programs! When a sequence of instructions doesn't work as expected, it's called a 'bug'. Use this logbook to track the bug, explain why it happened, and write the corrected code to make the program run perfectly.

Word bank: bug · debug · algorithm · sequence · error · solution · logic · predict · test

1. The Unexpected Result: Describe the program you were trying to write and explain what went wrong when you ran it. (3 marks)

2. The Bug Hunt: Look at your instructions. Where is the exact step where the logic fails? Copy the incorrect step here. (2 marks)

3. The Why Factor: Why do you think this error happened? Was it a typo, a missing instruction, or the wrong order? (3 marks)

4. The Solution: Rewrite the instructions here so the program works correctly. Remember to keep them in the right order! (4 marks)

5. The Final Test: Once you fixed the code, what happened when you ran the program? Did it work as you expected this time? (2 marks)

Extension challenge: Imagine a classmate is having trouble with their code. Write a 'Debugging Tip' for them, explaining how they can check their work to find errors before they even run their program.