

Kit's Coding Adventure: Building My First Program

Learning objective: To design and explain a computer program using sequence, selection, and variables.

Use this writing frame to describe the program you are designing. Think about what your code does, the logic behind the steps, and how you would debug it if something went wrong.

My computer program is designed to solve the problem of...

Word bank: algorithm · sequence · selection · variable · debug · execute · consequently · furthermore · in addition to · if this happens, then... · loop

1. The Goal: What is the primary purpose of your program, and who is the intended user? Start with: My program aims to... (2 marks)

2. The Algorithm: Describe the step-by-step sequence of your code. Remember to use technical vocabulary. Start with: To achieve this, the computer must first... (3 marks)

3. Selection: Explain how your program makes a decision (the 'if' statement). Start with: I have included a selection block which works by... (3 marks)

4. Variables: How does your program store information, such as a score or a timer? Start with: To track the progress of the program, I used a variable called... (2 marks)

5. Debugging: If the program does not work as expected, how will you find and fix the error? Start with: If my code fails to execute correctly, I will debug it by... (2 marks)

Extension challenge: Create a flowchart on a separate piece of paper that visually represents the logic you have described above, using standard symbols for start, process, and decision points.