

Kit's Clever Algorithm Planner

Learning objective: To design a clear and logical algorithm to solve a specific problem by breaking it down into a sequence of precise instructions.

Kit the fox needs your help! Algorithms are just sets of step-by-step instructions used to complete a task. Choose a simple daily task (like making a sandwich or brushing your teeth) and write the algorithm below. Remember, a computer needs very clear instructions to follow!

Word bank: Algorithm · Sequence · Instruction · Logic · Step · Input · Output · Order

1. Task Title: What specific task are you creating an algorithm for? (1 mark)

2. The Starting Point: What is the very first thing that must happen to begin this task? (2 marks)

3. The Steps: Write your algorithm as a numbered list. Ensure your instructions are in the correct order. (5 marks)

4. Debugging: Imagine you missed a step. What would go wrong? Explain how you would fix the error. (3 marks)

5. The Final Result: What is the 'output' or the finished goal once your algorithm is complete? (2 marks)

Extension challenge: Try testing your algorithm on a friend or family member. If they follow your instructions exactly as written, are they able to complete the task successfully? If not, rewrite your steps to make them clearer.