

Algorithms Instructions

KS2 Computing · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

What is an algorithm?

Step 1 · Think about following a recipe step by step

A set of clear, ordered instructions

Answer: An algorithm is a precise set of step-by-step instructions to complete a task

Check: Computers follow algorithms exactly, in the exact order given.

2. Now try one with the steps

Why would 'put on your shoes, then put on your socks' be a bad algorithm?

Step 1 · Think about the correct order of these actions in real life

Answer:

3. Practice

Have a go at each one. There is space underneath to work it out.

1. What do we call a set of step-by-step instructions?

2. Why does the order of steps in an algorithm matter?

3. Write the steps (an algorithm) for brushing your teeth.

4. Do computers follow algorithms exactly, or do they sometimes skip steps?

5. Write an algorithm for making a jam sandwich, in the correct order.

6. Why is it important to test an algorithm before trusting it, rather than assuming it's correct?

4. Before you hand it in

Writing steps out of order, assuming a computer (or person) will 'figure it out'.

Always double-check the real-world order of actions before writing them algorithm.

Leaving out a step that seems 'obvious'.

Write out every single step needed, even ones that feel obvious to a person.