

Algorithms

Computing KS1 Year 1



Algorithms – Year 1

Computing

Key Stage 1 Year 1

Learning aims

Children understand what algorithms are.

Children create and test simple algorithms in an unplugged activity.

Curriculum links

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
- Create and debug simple programs.

Keywords

Algorithm. Above. Below. Next to. Inside. Beside. On top of.

These can also be found at the end of this PDF.

Algorithm

Above

Below



PowerPoint presentation

The accompanying PowerPoint presentation has 14 slides with the following learning points:

- Explanation that an algorithm is a set of instructions written for a computer.
- Explain the importance of writing the instructions step-by-step in the correct order.

Activity:

- Go through a set of unplugged instructions with the children to draw a house. Explain to the children that you are pretending that it's a real house, which will have to stand up by itself. This sets up the need for the correct order (i.e., floor and walls before the roof).
- Look at what might happen if the instructions were given in the incorrect order. (The roof was the first instruction. Oh dear, it fell and smashed!).
- Provide the children with the grid paper provided at the end of this PDF (or in the word option), or use your own.
- Put the children in pairs.
- Making sure that the pairs cannot see each other's work, ask the children to write a set of instructions to draw another simple picture (we have given the examples of a robot or a bicycle.)
- Discuss the results with the children.





Algorithms for Year One: Keywords Flashcards



Algorithm

Above

Below

Next to

Inside

Beside

On top of



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On top of