# New Jam Sandwich Algorithm

V2

Supported by
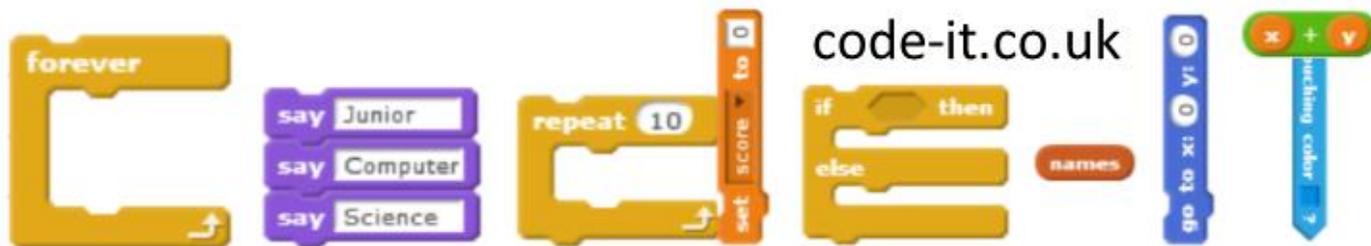
Hampshire Services

HIAS SCHOOL IMPROVEMENT

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# Algorithm

Precise instructions or rules to solve a problem

## Algorithm

### Formal Algorithms

### Everyday Algorithms
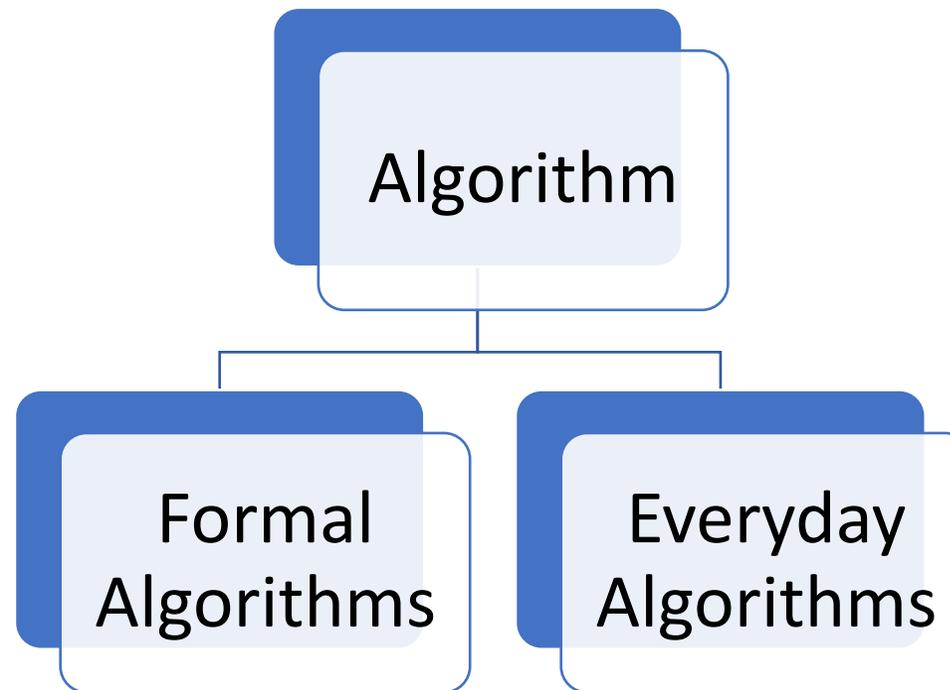
Clever instructions that are used by lots of people to solve complex problems. These are like mathematical formula and writing a new one can make you famous.

Instructions and rules that all of us use to help us live our lives more efficiently
*Examples*
*Order we brush our teeth*
*Order we get dressed*
*Order we travel to school*
*Recipe to make a cake*
*Order we make a sandwich*

Look at the things in front of your teacher

# Jam Sandwich Everyday Algorithm

Work with a partner to write an algorithm that your teacher can follow safely to make a jam sandwich.

Your teacher has forgotten everything they ever knew about food preparation! They are not even sure how the knife works, how to open a jam jar or spread butter. They do know the names of everything.

Write your algorithm as a numbered list. Someone else will read it to the teacher, so make sure it is readable.

# English NC Links

Pupils should be taught to:

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

- use sequence, selection, and repetition in programs; work with variables and various forms of input and output

- **use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms** and programs

# Welsh NC Links

**Computation is the foundation for our digital world**

**Progression Step 2**

I can use computational thinking techniques, through unplugged or offline activities.

I can create simple algorithms and am beginning to explain errors.

**Progression step 3**

I can explain and debug algorithms.

# Why update the Jam Sandwich?

There are lots of small anomalies in the original jam sandwich

- Algorithms can be written in any way as long as they are precise and can be understood by another human. The original jam sandwich limits pupils language through a proscribed word bank which is much more akin to programming which uses a limited number of commands.

- Pupils instruct their teacher who is pretending to be a robot. It would be more precise to say they are programming their robot teacher or are they as they are only pretending. You can see it gets a bit complicated.

- This version is just as much fun but doesn't mix up programming and algorithm writing.