Computing — Year 2 (Spring)

Understanding Algorithms and Making Things Happen

Key vocabulary to remember and use in your learning

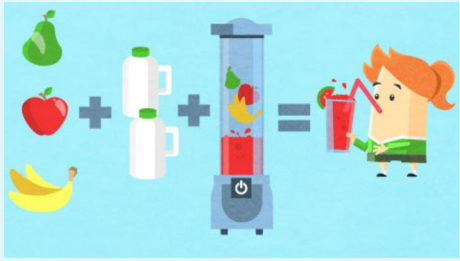
debug	looking for errors in a set of instructions and correcting them
sprite	an image or 'character' that can be coded or programmed to do certain actions
content	digital content is material that is on a device
reasoning	thinking about how or why something works
unambiguous	when there is only one possible meaning to something—it cannot be misunderstood
outcome	what happens at the end of a sequence of instructions
control	to control a sprite means to make it do what you want it to do.

Key knowledge to know and use

- A sprite can be controlled using an algorithm
- An algorithm is your plan to fix a problem and a program is the algorithm written in code that is understood by the computer
- Instructions have to be clear and unambiguous, or a computer will not be able to carry them out
- It is important to debug your algorithms, tracing each instruction so that you know which parts need to be fixed
- There may be more than one way to program a computer to carry out an action — more than one solution to a problem
- We can look at an algorithm and use our reasoning skills to predict what it does and how it solves a problem

What is the algorithm?

Here you can see an image. The image shows an algorithm. Can you work out what the algorithm is for? What are the different steps?



Online Safety—Scary News

Some of what you see online can be upsetting or inappropriate. This can include pictures, text and videos on apps such as YouTube. It is important to talk to a Grown-up that you trust if you see or hear something that upsets you.

Algorithms at home

Can you write an algorithm for getting ready for bed? Think about the things you need to do before you fall asleep. What order do you do them in?