Year 3 Computing Knowledge Organiser- Programming 1

Prior Learning: instructions as algorithms, instructional language, understanding 'debug' as correcting mistakes in programing, programming a beebot, positional language

Facts

1. What is an algorithm?

An algorithm is a sequence of instructions or a set of rules that are followed to complete a task.

The task can be anything, but clear instructions must be given for the task.

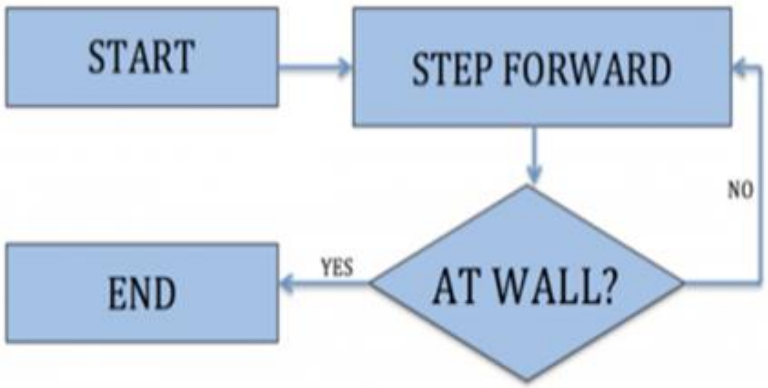
2.What does an algorithm look like?

A flowchart is used to show processes and decisions made in an algorithm, whilst the arrows are used to show the flow of the program.

Processes are shown as **squares** and are used when we are doing something.

Decisions are shown as a **diamond** and are used to represent when we are testing something.

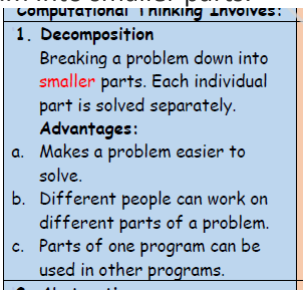
	Used for direction of data flow.
	***Process- Something that happens.***
	***Decisions- yes or no***



Youtube
https://www.youtube.com/watch?v=McM9YCeyt_Q
What is an algorithm?

Vocabulary

Decomposition- Splitting the sequence of an algorithm into smaller parts.



Sequence- A set of instructions that are followed in order.

Input- The way a computer receives data (keyboard, mouse, touchscreen).

Selection- A way to make a choice in a computer program (using if…then…else…).

Simple program- Instructions written in language (code) that a computer will understand.

Debug- To detect and correct the errors in a computer program.