

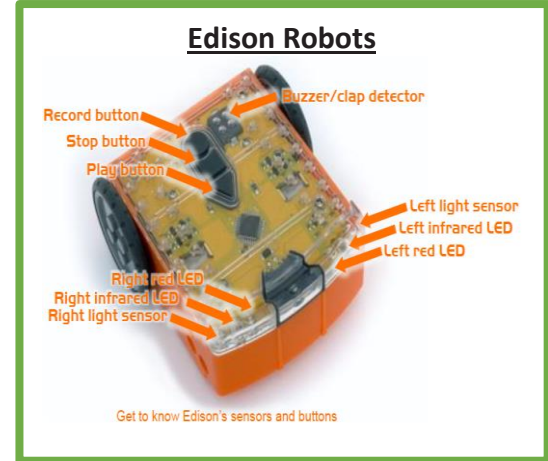
Kemnal Technology College – Computer Science Kemnal Key – Year 7 Term 4

Key Vocabulary	
Algorithm	A set of rules or instructions to be followed.
Flowchart	A graphical way of showing an algorithm.
Mimic	In Flowol, a simulation of a real world environment.
Selection	Deciding what code to run based on a decision or answer to a question. E.g. an IF statement.
Sequence	A set of instructions that are completed in the exact order that they are written.
Iteration	Where a set of instructions is repeated . E.g. a WHILE loop, FOR loop and REPEAT UNTIL loop.
Instruction / Statement	A command that the programmer gives to the computer.
Input	Data that is given to the computer or program to then use.
Output	Information that is provided by the computer or program.
Procedure	A group of instructions grouped together that can be used by the main program.
Variable	A name given to a value in a program that can change when the program is running.

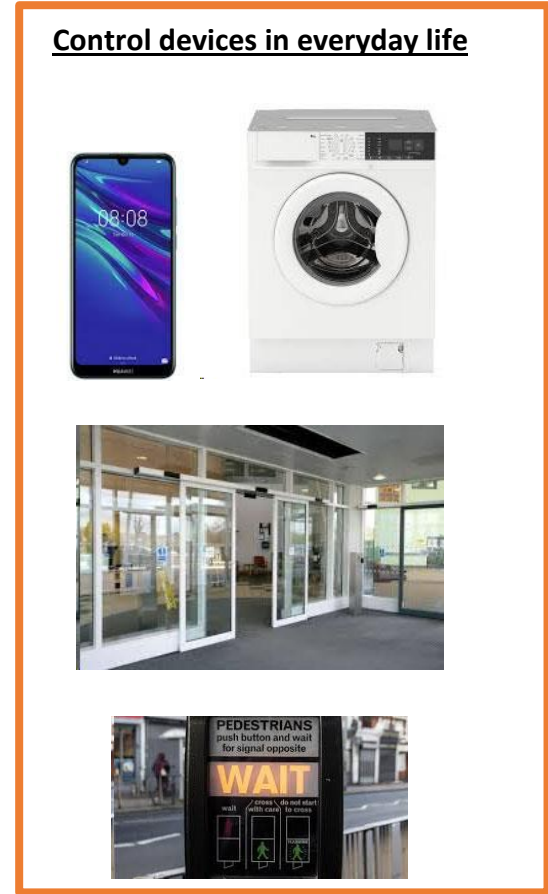
A flowchart is a way of visually displaying a set of instructions (or an algorithm) for any particular task.

Flowcharts have many uses and are one way of showing the sequence of instructions for an automatic computer system.

A flowchart can represent the algorithm (or set of instructions) for a computer or a computer controlled system. This could be anything from a set of traffic lights, a central heating system on a timer or an electric kettle!



- Kemnal Key Questions**
- What is a flowchart?
 - What does the term sequence mean?
 - What does the term iteration mean?
 - What are the 3 key words in our specific structure we use in our topic?
 - Explain the purpose of a subroutine in a flowchart



Flowchart Symbols	
	Used at the start and end of a flowchart.
	Controls all the inputs and outputs.
	General instructions and calculations carried out by the computer.
	Where a question/decision is asked. Must have a 'Yes' and 'No' output.
	Used to connect flowchart symbols to show the direction of flow in the program.

Edison Robots

Edison's line tracking sensor is made up of two parts a red LED light and a light sensor. The line tracking sensor also reads special barcodes that activate pre-installed programs.