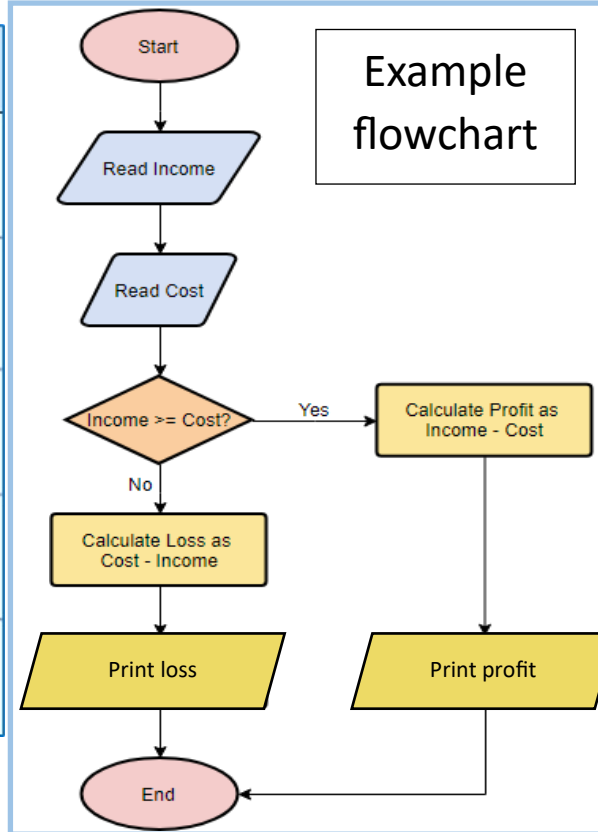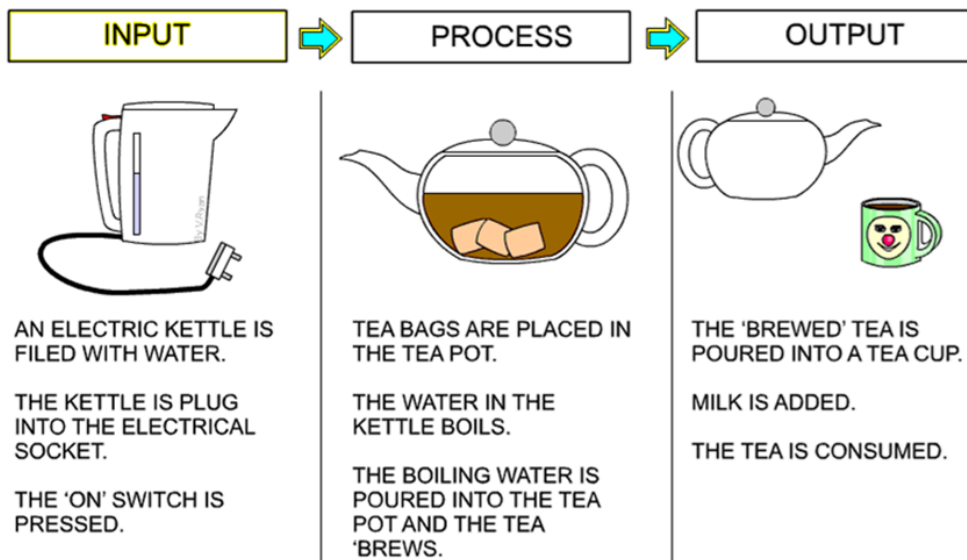| Symbol	Name	Function
	Start/end	An oval represents a start or end point
→	Arrows	A line is a connector that shows relationships between the representative shapes
	Input/Output	A parallelogram represents input or output
	Process	A rectangle represents a process
	Decision	A diamond indicates a decision

Example flowchart

SAMPLE SYSTEMS DIAGRAM

INPUT ⇨ PROCESS ⇨ OUTPUT

AN ELECTRIC KETTLE IS FILED WITH WATER.

THE KETTLE IS PLUG INTO THE ELECTRICAL SOCKET.

THE 'ON' SWITCH IS PRESSED.

TEA BAGS ARE PLACED IN THE TEA POT.

THE WATER IN THE KETTLE BOILS.

THE BOILING WATER IS POURED INTO THE TEA POT AND THE TEA 'BREWS.

THE 'BREWED' TEA IS POURED INTO A TEA CUP.

MILK IS ADDED.

THE TEA IS CONSUMED.

Examples of Algorithms

- Lego instructions

- Recipes

- Dance routines

- Following directions (Sat Nav)

- Crossing the road at traffic lights

Computational thinking	The thought process involved in finding a solution to a problem.
Flowchart	A visual diagram of the sequence of steps and decisions needed to perform a process
Input	Entering data into the computer – using keyboard, microphone, webcam
Output	Data generated by a computer and shown through monitor, speaker, projector
Decomposition	involves breaking down a complex problem or system into smaller parts that are more manageable and easier to understand. The smaller parts can then be solved individually.
Abstraction	involves filtering out – essentially ignoring – the characteristics that we don't need in order to concentrate on those that are important in order to solve the problem.
Pattern recognition	involves finding similarities or patterns among small decomposed problems that can help us to solve more complex problem more efficiently.
Algorithm	A set of step by step instructions to solve a problem. If you can tie shoelaces, make a cup of tea, or prepare a meal using a recipe then you already know how to follow an algorithm. Flowcharts are a good way of showing the steps visually.

Computational thinking