

Year 5: Computing and Online Safety

Controlling Devices: Flowol

Flowcharts are used to **program** and **control** devices. **Flowol** is a computing program which includes **simulations** of real-life automatic computer operated systems.

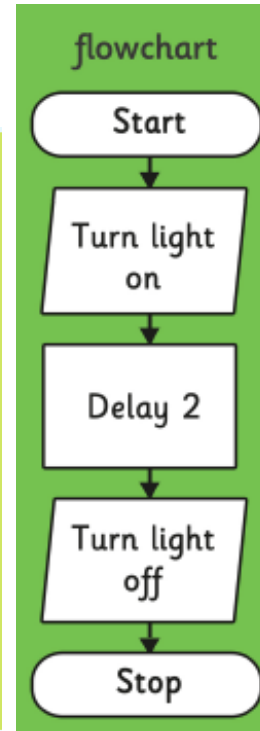
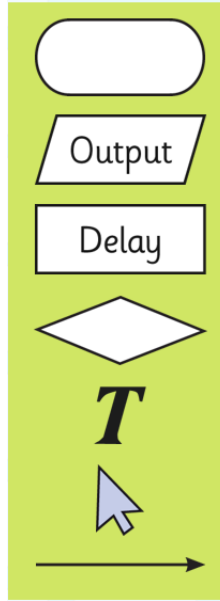
You will begin by drawing and interpreting a simple flowchart with the correct **symbols** before you move onto using Flowol to create a flowchart to control a **simulated device**.

As you become more experienced, you will be able to control **multiple outputs** at the same time and use a **decision based symbol** based on the input.

You may even challenge yourself to create a flowchart program which includes a **subroutine**!

Remember, it is acceptable to make mistakes, as long as you can work out how to **debug** so that your program works effectively.

Flowol Toolbar



Vocabulary

cardholder	The person who owns the credit or debit card.
control	To influence or direct the behaviour of the simulation.
debug	To fix what has gone wrong.
decision-based symbol	These symbols branch the flowchart differently based on the variable.
edit	To make changes to something.
flowchart	A diagram, or sequence of actions or movements, in a complex system or activity.
Flowol	A computing program used to control and program real-life simulations.
in-app purchase	Extra content or subscriptions that you buy on an app.
input	Often contains the start of a flowchart.
multiple output	A variety of outputs based on the different conditions that may occur.
output	Often results in the end of a flowchart.
permission	To allow someone to do something or providing consent.
program	To provide a computer with coded instructions for the performance of a task.
sequence	To put events in the correct order.
simulated device	A device which mocks the real-life process.
simulation	Imitates the real world processes with the use of models and images.
subroutine	Smaller codes within a larger routine that program to work alongside each other.
subscription	An arrangement to receive something by paying regularly at a set time or date.

Privacy and Security

The word '**app**' is short for **application** and often includes games and social media platforms. Downloading apps is quite simple: you just visit the **device store** and **download** it. However, it is important to remember that some apps are free and some need money to be downloaded. Although many apps are free, it doesn't necessarily mean that they won't cost you (or your parents) money! In most of your apps, you can buy extra things including:

- **hints or clues** to solve puzzles;
- **outfits** for characters;
- **removing adverts** from your game;
- **extra health** or **lives** in games.

Sometimes, **in app purchases** aren't what they seem. You might think that you are buying a **one-off** purchase, but they actually take money from your account each month. It is essential that you **request permission** from the **card holder** before you make any purchases!



CRC Article 29: All children have the right to be the best that they can be.
CRC Article 19: All children have the right to be safe.

