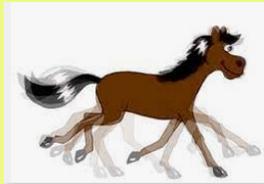# Year 3 — Knowledge Organiser — Computing

Animation

Animation is a way of making a movie from many still images. The images are put together one after another and then played at fast speed to give an feeling of movement.

Onion skinning

Onion Skinning technique is when the shadow of a previously drawn frame can be seen This helps the animator draw the next frame so that the moving images in the final animation are smooth.

In the past most animation was drawn or painted by hand. Many cartoons were made this way. Now there are lots of ways in which you can use a computer or tablet to make animation films. But the idea is the same, the movement changes in each frame and each second of film is made up of several frames.

Stop Frame Animation

Stop Frame animation is used to make real objects look as though they are moving. It is done by using a camera to take a single pictures called a frames. The model is then moved slightly and another frame is taken. This is repeated over and over to. When the frames are put together it looks like the model is moving.

Key Vocabulary

Animation	A way of making a 2D film made of individual images
Stop motion	A way of making objects look as though they are moving.
Frame	A single image within an animation
Animator	Person creating an animation
Input device	A device the receives data or information
Output device	A device that sends data or information
Computer network	Two or more devices connected together.
Online profile	The way someone wants to be seen and thought of online
Permission	Allowing or saying yes to something to happen
Password	A word hat you keep private that allows you to keep information safe.
Search engine	Software on a computer that helps you find things on the internet.

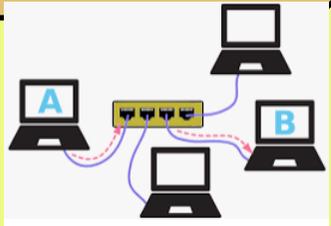# Year 3 — Knowledge Organiser — Computing

Input and output devices

Input is data or information that a computer receives. Output is data that a computer sends. There are many different devices. Some are input devices, some are output devices and some are both.

Networks and switches

Devices need to be connected to each other so that they can share information and communicate. If there are lots of devices connected together this is called a Network. There can be lots of data or information traveling between all of the devices on a network. A switch makes sure the right data goes to the right device.
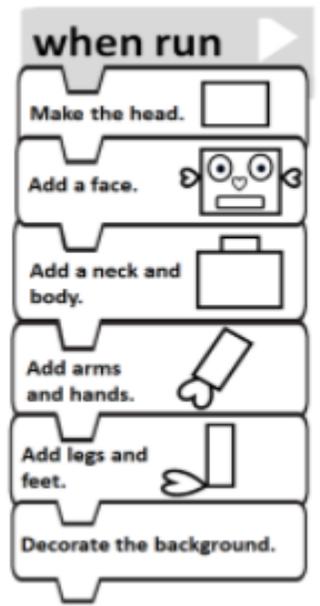

Algorithms and Coding

An Algorithm is a set of instructions that are written in a precise way. Coding is the language that a computer can understand. When you are programing a device you need to consider the instructions or algorithm you need to make it do something and then think of the language or code that you need to make the computer understand.

Keeping safe

You must not give any personal information to online friends. If you are online and something or someone makes you feel unhappy or uncomfortable you can contact CEOP by clicking the logo or tell a trusted adult

Search engines

A search engine is a software program that helps you find information on the internet. There are lots of search engines, but it is important that you use one that is safe for children. This means that it stops you seeing things you should not see on the internet

Online friends and Offline friends

Offline friends are people you have actually met or see regularly. You know what they look like and normally your families know them as well. Online friends are just people you know through a computer. Either through a game or messaging. You do not know what they look like or who they really are, just what they have told you. Not everyone tells the truth.