# Year 3 - Online safety

| | |
|---|---|
| Auto complete | When software guesses what you are typing and suggests a word or phrase. |
| Belief | Something we accept to exist or be true, usually without proof. |
| Fact | Something that can be proven to be true by evidence. |
| Fake news | Online news or stories that are not true. |
| Opinion | A view or judgement about something. |
| Privacy settings | The controls put in place to manage what kind of information and how much of your information can be shared with or seen by other people and companies. |
| Social media platforms | Websites and apps where people can share information about what's happening in their lives. |

## If something online makes you feel uncomfortable or scared:

| Block it and report it | Check your device and privacy settings | Tell a trusted adult |
|---|---|---|

# Key facts

BBC's Own It website (https://www.bbc.com/ownit) has lots of tips and information to help you stay safe online



It is important to think about what information we share online.



Digital devices are communicating all the time and sharing our personal information between themselves.

Age restrictions show the minimum age you should be to use social media sites and apps.
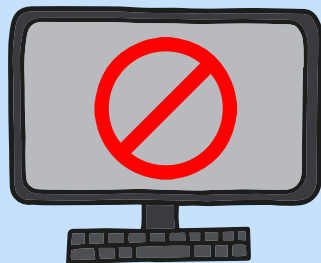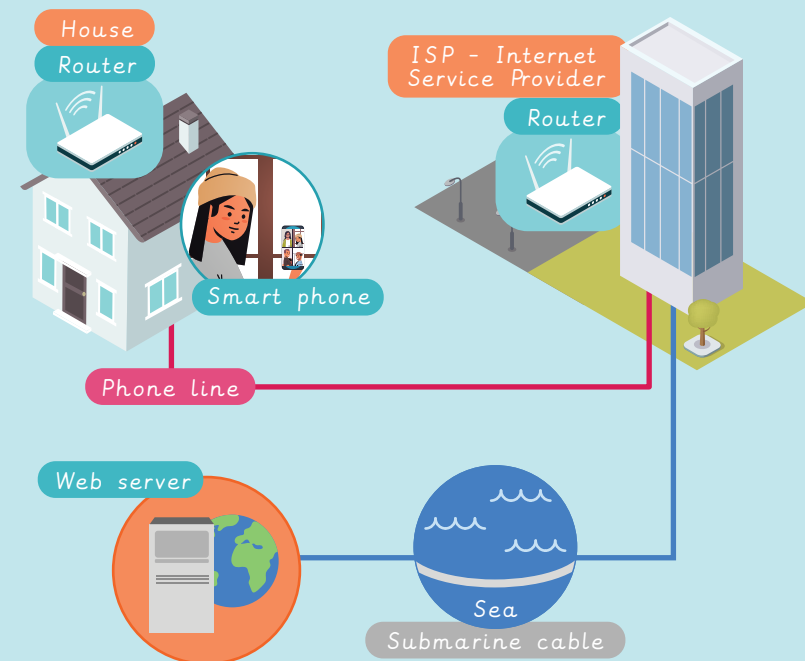
# Networks and the internet

| | |
|---|---|
| Device | Equipment created for a certain purpose or job. |
| DSL | Digital Subscriber Line. An internet connection for rural areas, where wired services are not available. It uses communication satellites to send and receive data and is a slower internet connection than wired connections. |
| File | An item on a computer that can keep data in various forms such as images, music and documents. |
| Internet | A worldwide network, enabling tens of millions of computers around the globe to share vast amounts of information, and communicate with other online users across the globe. |
| Network | When more than one electronic device is connected in a network through the internet or a local connection in order to share files and information. |
| Network map | A diagram that shows what type of and how many devices are on a network. It also shows how they are connected to each other. |
| Network switch | A device that deals with the movement of network information. |
| Router | The main device responsible for providing internet access to a network, and can be connected to through a wired connection or WiFi. |
| Server | A computer or computer program that provides data and information to other computing devices. |
| Submarine cables | Cables that run under the sea to allow information to be accessed and (shared around the world or across continents.) |
| The Cloud | Refers to data and files that are stored and accessed on servers via the internet. |
| WiFi | When you have, or can connect to a network that is wireless. |
| Wired | An electronic device is considered 'wired' when it is connected to the network through cables. |
| Wireless | An electronic device is considered 'wireless' when it is connected to the network through signals. |
| Wireless access point | A device that enables other electronic items to connect wirelessly to the internet. |

# Key facts

**Network map:**



House
Router
ISP - Internet Service Provider
Router
Smart phone
Phone line
Web server
Sea
Submarine cable

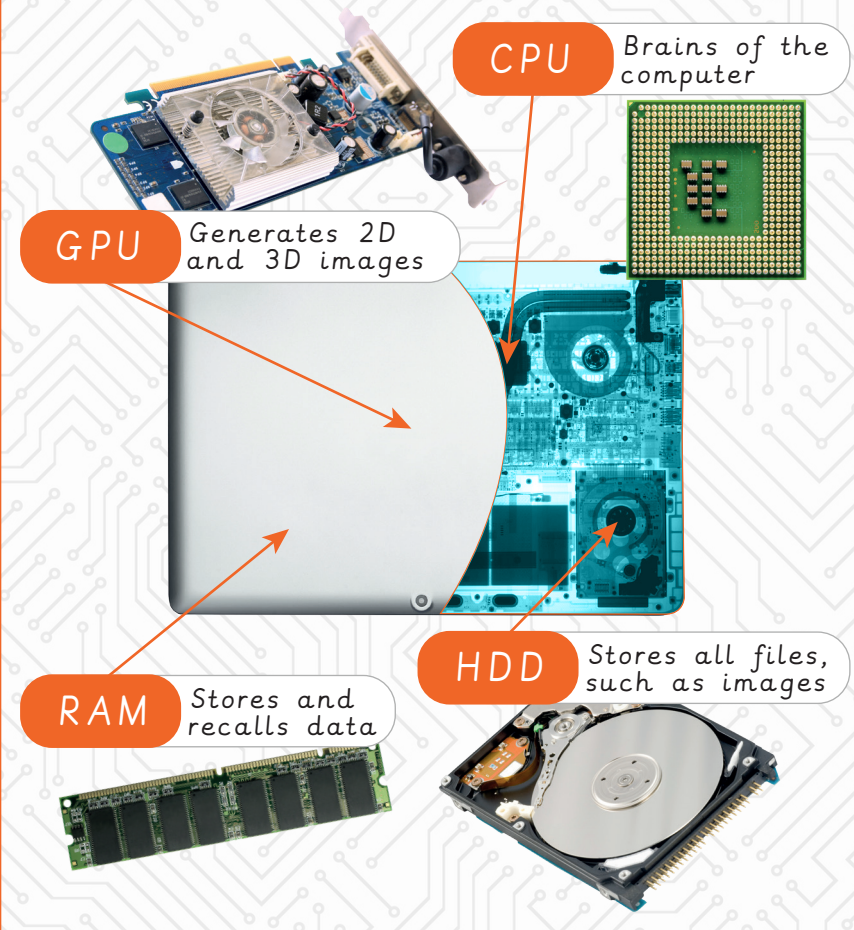**The internet can be used for:**



- Communicating (email, video call, voice call etc.)
- File sharing
- Websites
- Uploading and downloading files
- Streaming media (videos, music etc.)
- Playing online games

# Journey inside a computer

| | |
|---|---|
| Algorithm | A sequence of instructions when followed, solve a problem. |
| Computer | Electronic machine that accepts and processes information to produce an output, and then stores the results. |
| Computer Program | A series of instructions, that are written for a computer to follow, using inputs and outputs to produce an outcome. Also known as software or applications (apps). |
| CPU | Central Processing Unit. The brain of a computer that deals with all the data it receives from input and output devices, as well as programs run within the computer. |
| Data | Information used for a specific purpose or investigation. |
| Desktop | A tower computer that needs a mouse, keyboard and monitor, that remains in one place. |
| GPU | Graphics Processing Unit. It is a piece of hardware that is used to help generate 2D and 3D images for programs such as games. |
| Hard disk drive HDD | An internal or external device that can store information such as files, documents, images and programs. |
| Instructions | A series of steps that need to be performed in order. |
| QR code | Quick Response code. Is presented in a similar way to a bar code and when scanned, takes you to a specific website or provide information. |
| RAM | Random Access Memory. A piece of hardware that allows data to be recalled or stored within a computer. |
| ROM | Read Only Memory. Information stored within ROM can only be read and not edited. |
| Tablet device | A handheld computer, that consists of a touchscreen, operating system and a rechargeable battery. |
| Trackpad | An input device commonly found built into laptops. It is used to move the cursor with the touch of your finger, and some allow for multiple finger gestures. |

Scan each of these quick response codes, with a QR scanner app or device and see where they go!

## Key facts

Computer parts inside of a laptop:



CPU — Brains of the computer

GPU — Generates 2D and 3D images

HDD — Stores all files, such as images

RAM — Stores and recalls data

Other portable electronic devices:

# Video trailers

| | |
|---|---|
| Application | A computer program, sometimes referred to as an app. |
| Desktop | A tower computer that needs a mouse, keyboard and monitor, that remains in one place. |
| Digital device | Electronic devices that operate off a binary system in 1s and 0s. |
| Edit | To change and amend something. |
| Film | Recorded moving pictures, that can make up a clip or film. |
| Film editing software | Software with editing abilities to cut, crop and add effects to video footage. |
| Graphics | The use of images or visuals designed to communicate, demonstrate a concept or promote something. |
| Import (software) | To pull another file into software, to place, edit and manipulate. |
| Key events | Important parts within a narrative or a particular period in time. |
| Laptop | A compact computer that is easy to carry and move around. |
| Plan | An idea about how to do something in future. |
| Recording (media) | To capture sounds or video footage, using an electronic device. |
| Sound effects | Sounds to enhance an event or bring fantasy aspects to life in a film or other media, for example, the whoosh of a time machine. |
| Time code | Time references on film or animations. |
| Video | Recorded moving pictures, that can make up a clip or film. |
| Voiceover | A voice recording which overlays a video or presentation. |

## Did you know?

Digital sound waves can be viewed and edited on a computer. They look like this:
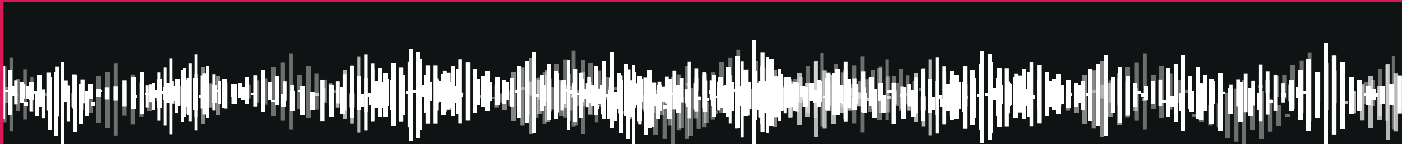


## Key facts

Transitions are visual effects that can be applied to occur in-between digital media (slides, images or video clips).
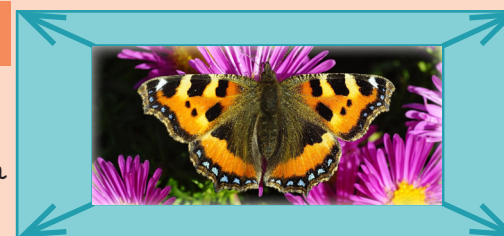
### Morph

The media appears from a selected corner.



### Cross zoom

The media zooms and fades in from the middle.
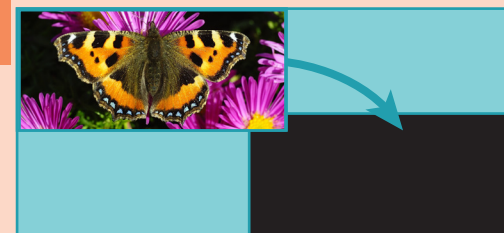


### Peel off
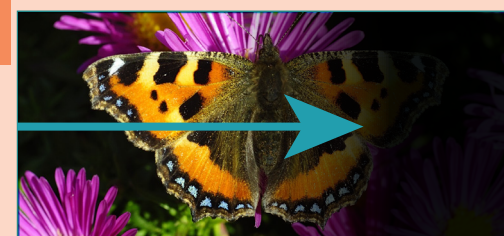
The page peels off to reveal the media.



### Dip to black

The media fades to a black screen.



### Directional wipe
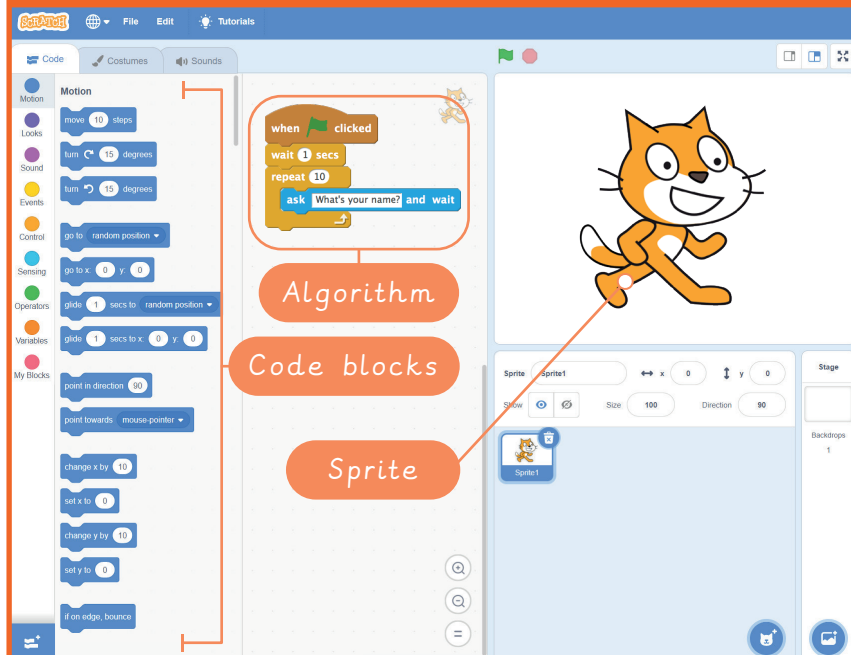
The media appears from a selected side.

# Programming - Scratch

| | |
|---|---|
| Animation | Bringing concepts to life through 2D or 3D moving pictures or photographs, for example cartoons. |
| Application | A computer program. |
| Code | A set of instructions written in programming language, to tell a computer what to do. |
| Code block | A visual representation for a section of code that performs a certain job. They can be snapped together to build a program. |
| Debug | To remove and repair the error or mistake in computer code. |
| Decompose | To break something down into smaller chunks. |
| Interface | The menus, buttons and other functions which makes a computer program or website intuitive to humans. |
| Loop | A repeated sequence of instructions. |
| Predict | To make an educated guess, as to what might happen or occur as the result of something in the future. |
| Program | A series of code that instructs the computer to perform specific tasks. |
| Remixing code | Altering code that already exists. |
| Repetition code | To create loops in your program, to make it more efficient. |
| Review | To look at something in detail and give constructive feedback if it requires improvement. |
| Sprite | Visual objects that can be moved or perform an action through code, for example: move forwards by one step. |
| Tinker | To explore and play with something to discover the key functions. |

## Scratch code blocks colour key:

Motion  Sound  Control  Operators  My Blocks

Looks  Events  Sensing  Variables

© Scratch

## Key facts

Scratch is a coding program, that lets you build interactive games and animations.



Algorithm

Code blocks

Sprite

## Did you know? In Scratch, you can:



Abby    Amon    Andie
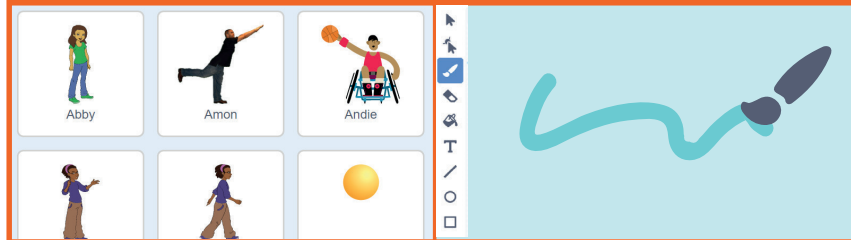
**Choose a sprite**



**Paint your own sprite**
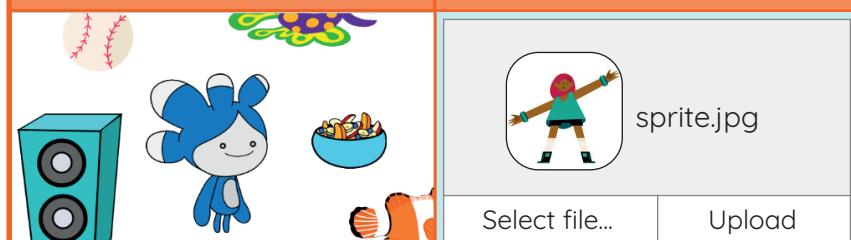


**Generate a random (surprise!) sprite**

sprite.jpg

Select file...    Upload

**Upload a sprite**