



Coding

Key Learning

- To begin to understand selection in computer programming.
- To understand how an IF statement works.
- To understand how to use co-ordinates in computer programming.
- To understand the 'repeat until' command.
- To understand how an IF/ELSE statement works.
- To understand what a variable is in programming.
- To use a number variable.
- To create a playable game.

Key Resources

purple
mash



Key Vocabulary

Action

The way that objects change when programmed to do so. For example, move.

Background

In 2Code the background is an image in the design that does not change.

Command

A single instruction in 2Code.

Execute

This is the proper word for when you run the code. We say, 'the program (or code) executes.'

Alert

This is a type of output. It shows a pop up of text on the screen.

Button

A type of object that responds to being clicked on.

Debug/Debugging

Fixing code that has errors so that the code will run the way it was designed to.

Algorithm

A precise, step-by-step set of instructions used to solve a problem or achieve an objective.

Code blocks

A way to write code using blocks which each have an object or an action.

Design

In coding, this is a plan for the program showing the visual look of the user interface (the screen) with the objects. The algorithm can be represented as part of the design, showing actions and events.

Key Vocabulary

Event

An occurrence that causes a block of code to be run. The event could be the result of user action such as the user pressing a key (when Key) or clicking or swiping the screen (when Clicked, when Swiped). In 2Code, the event commands are used to create blocks of code that are run when events happen.

Nest

When coding commands are put inside other commands. These commands only run when the outer command runs.

Implement

When a design is turned into a program using coding.

Repeat until

In 2Code this command will repeat a block of commands until a condition is met.

Flowchart

A diagram that uses specifically shaped, labelled boxes and arrows to represent an algorithm as a diagram.

'If/Else' Statement

A conditional command. This tests a statement. If the condition is true, then the commands inside the 'if block' will be run. If the condition is not met, then the commands inside the 'else block' are run.

Object

Items in a program that can be given instructions to move or change in some way (action). In 2Code Gibbon, these include character, turtle, button, vehicle, animal, food, shape, number, input and label.

Predict

Use your understanding of a situation to say what will happen in the future or will be a consequence of something.

'If' Statement

A computer uses an IF statement to decide which bit of code to run. IF a condition is true, then the commands inside the block will be run.

Input

Information going into the computer. This could be the user moving or clicking the mouse, or the user entering characters on the keyboard. On tablets there are other forms such as finger swipes, touch gestures and tilting the device.

Prompt

A question or request asked in coding to obtain information from the user in order to select which code to run.

Repeat

This command can be used to make a block of commands run a set number of times or forever.

Run

Clicking the Play button to make the computer respond to the code.



Online Safety

Key Learning

- To understand how children can protect themselves from online identity theft.
- To understand that information put online leaves a digital footprint or trail and that this can aid identity theft.
- To identify the risks and benefits of installing software including apps.
- To understand that copying the work of others and presenting it as their own is called 'plagiarism' and to consider the consequences of plagiarism.
- To identify appropriate behaviour when participating or contributing to collaborative online projects for learning.
- To identify the positive and negative influences of technology on health and the environment.
- To understand the importance of balancing game and screen time with other parts of their lives.

Key Resources

purple
mash



2Connect



2Investigate



SPAM

Key Questions

What is meant by a digital footprint?

A digital footprint is the information that exists about a person based upon sites that they have visited, searches that they have done, information that they have shared and other online behaviours.

What is SPAM?

SPAM messages are emails or online messages sent from a computer to many other users. The users are sent the email without requesting it. The purpose of SPAM is for advertising, phishing or malware.

What is meant by plagiarism?

Plagiarism refers to using someone else's work and claiming it to be your own.

AdFly

An online advertising marketplace that allows publishers to monetize their website traffic by placing advertisements on their site.

Collaborate

To work jointly on an activity or project.

Digital footprint

The information about a person that exists on the Internet as a result of their online activity.

Plagiarism

Taking someone else's work or ideas and passing them off as one's own.

Spam

Messages sent over the Internet, typically to many users, for the purposes of advertising, phishing or spreading malware.

Key Vocabulary

Attachment

A file, which could be a piece of work or a picture, that is sent with an email.

Cookies

A small amount of data generated by a website and saved by a web browser. Its purpose is to remember information about the user.

Malware

Software that is specifically designed to disrupt, damage, or gain unauthorised access to a computer system.

Ransomware

A type of malicious software designed to block access to a computer system until a sum of money is paid.

Virus

A piece of code which can copy itself and typically has a damaging effect on the device, such as corrupting the system or destroying data.

Citation

Making reference to the original source of a piece of information quotation or image.

Copyright

When the rights to something belong to a specific person.

Phishing

Practice of sending email pretending to be from reputable companies in order to persuade individuals to reveal personal information, such as passwords and credit cards numbers.

SMART rules

A set of rules based around the word SMART designed to help you stay safe when online. SMART represents the words Safe, Meet, Accept, Reliable, Tell.

Watermark

Watermarks are used mainly on images or videos to show who the content belongs to.



Effective Searching

Key Vocabulary

Key Learning

- To locate information on the search results page.
- To use search effectively to find out information.
- To assess whether an information source is true and reliable.

Key Resources



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2Publish Plus



Balanced View

Presenting opposing points of view fairly and without bias.

Easter eggs

An unexpected or undocumented feature in a piece of computer software or on a DVD, included as a joke or a bonus.

Internet

A global computer network providing a variety of information and communication facilities.

Key Questions

What is a search engine?

A search engine is a piece of software that allows the user to find and display pages from the World Wide Web.

Key words

A word or a group of words an Internet user uses to perform a search in a search engine.

Reliability

The degree to which the result of something can be depended on to be accurate.

Results page

Where the answers to a search are displayed.

Search engine

A program that searches for and identifies items in a database. Used especially for finding sites on the World Wide Web.