# Computing Vocabulary - Year 1

### Unit 1.1: Online Safety and Exploring Purple Mash

# Log in

Using a username and password to access a system.

# Log out

Leaving a computer system.

# Avatar

A digital picture to represent someone.

# **Tools**

They are on Purple Mash with the different learning apps.

# Username

A name that is used by a person to access an online site.

# My Work

The place on Purple Mash where your work is stored. Only you and your teachers can access this.

# Notification

A system that lets you know if you have something to look at. On Purple Mash this is shown by a bell.

# Save

Store your work as you create something so it can be accessed later.

## **Password**

A series of letters, numbers and special characters that is entered after the username to access an online site. In Purple Mash, this can also be a series of pictures.

# **Topics**

The area on Purple Mash that contains ready-made resources.



# **Unit 1.2: Grouping and Sorting**

# Sort

Put things together by features they have in common.

# Criteria

A way in which something is judged.

### **Unit 1.3: Pictograms**

# **Pictogram**

A diagram that uses pictures to represent data.

# Data

Facts and statistics collected together that can provide information.

# Collate

Collect and combine (texts, information, or data).

# **Unit 1.4: Lego Builders**

# Instruction

Information about how something should be done.

# Algorithm

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

# Computer

An electronic device for storing and processing data.

# Program

To provide (a computer or other machine) with coded instructions.

# Debug

To find and remove errors from computer hardware or software.



### **Unit 1.5: Maze Explorers**

# **Direction**

A course along which someone or something moves.

# Challenge

A task or situation that tests someone's abilities.

# Arrow

A mark or sign used to show direction or position.

# Undo

Cancel or reverse an instruction.

# Rewind

Move back several steps or to the start.

# **Forward**

To move in the direction that one is facing or travelling.

# Backwards

To move in the opposite direction to which one is facing.

# Right turn

To move the object in a clockwise direction.

# Left turn

To move the object in an anti-clockwise direction.

# Debug

To find and remove errors from computer hardware or software.

# Instruction

Information about how something should be done.

# Algorithm

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

# **Unit 1.6: Animated Story Books**

# **Animation**

Process of giving the illusion of movement to drawings and models.

# E-Book

Short for electronic book; a book that can be read on the computer or other electronic device.

# **Font**

The style of text used in a piece of writing on the computer or tablet.

# **File**

A piece of work on the computer.

# Sound Effect

A sound other than speech or music made for use in a play, film or computer file.

# Display Board

A way to share your work on Purple Mash.



### **Unit 1.7: Coding**

# Action

Types of commands, which are run on an object. They could be used to move an object or change a property.

# Code

Instructions written
using symbols and
words that can be
interpreted by a computer.

# **Event**

Something that causes a block of code to be run.

# Instructions

Detailed information about how something should be done.

# Output

An element in a computer program that can be changed using actions or properties.

# Scale

The size of an object in 2Code.

# Scene

The background and objects together create a scene.

# **Algorithm**

Types of commands, which are run on an object. They could be used to move an object or change a property.

# Command

A single instruction in a computer program.

# **Execute**

To run a computer program.

# **Object**

An element in a computer program that can be changed using actions or properties.

# Run

To cause the instruction in a program to be carried out.

# When clicked

An event command. It makes code run when you click on something (or press your inger on a touchscreen).

# Background

The part of the program design that shows behind everything else. It sets the scene for the story or game.

# Debug/ Debugging

Finding a problem in the code and fixing it.

# Input

Information going into the computer. Can include moving or clicking the mouse, using the keyboard, swiping and tilting the device.

# **Properties**

All objects in 2Code have properties that can be changed in design or by writing code e.g. image, colour and scale properties.

# Sound

In 2Code, this is a type of output command that makes a noise.



# **Unit 1.8: Spreadsheets**

# Arrow keys

On a standard keyboard these can be used to move around the cells of a spreadsheet.

# Columns

Vertical reference points for the cells in a spreadsheet.

# **Count Tool**

In 2Calculate, this counts the number of cells with a value that matches the value of the cell to the left of the tool.

# Lock tool

This tool prevents cell values being changed.

# Speak Tool

This tool will speak the contents of a cell containing a number each time the value changes.

# Backspace key

Use this key to delete the character before the current cursor position.

# Cells

An individual section of a spreadsheet grid. It contains data or calculations.

# Delete key

Use this key to remove the contents of a cell.

# Move cell tool

This tool makes a cell's contents moveable by dragand-drop methods.

# **Spreadsheet** A computer program that

A computer program that represents information in a grid of rows and columns.

# Cursor

An indicator on a computer screen identifying the point that will be affected by input from the user. Often a blinking vertical line.

# Clipart

Simple pictures and symbols available for computer users to add to documents.

# Image toolbox

Use this to insert images into cells.

### Rows

Horizontal reference points for the cells in a spreadsheet.

# **Unit 1.9: Technology Outside School**

# Technology

Science and engineering knowledge put into practical use to solve problems or invent useful tools.



# **Computing Vocabulary - Year 2**

### **Unit 2.1: Coding**

# Action

Types of commands, which are run on an object. They could be used to move an object or change a property.

# **Button**

A object on the screen which can be clicked on.

# Design Mode

Used to create the look of a 2Code computer program when it is run.

# Nesting

When you write a command inside something else e.g. a block of commands could be nested inside a timer.

# **Properties**

In 2Code, all objects have properties that can be changed in design or by writing code e.g. image, colour and scale properties.

# When clicked/ swiped

An event command. It makes code run when you click or swipe on something (or press/swipe your finger on a touchscreen).

# **Algorithm**

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

# Collision Detection

Detecting when two characters on the screen touch each other.

# **Event**

Something that causes a block of code to be run.

# **Object**

An element in a computer program that can be changed using actions or properties.

# Run

To cause the instruction in a program to be carried out.

# Scene

A visual aspect of a program.

# Sequence

When a computer program runs commands in order.

# **Text**

Typed letters on the screen.

# Background

The part of the program design that shows behind everything else. It sets the scene for the story or game.

### Debug/Debugging

Looking for any problems in the code, fixing and testing them.

# **Key Pressed**

Pushing down a key on the device's keyboard.

# **Predict**

Say what you think will happen when a piece of code is run.

## Scale

The size of an object in 2Code.

# Sound

This is a type of output command that makes a noise.

# **Test**

When code is run to check that it works correctly.

# **Timer**

Use this command to run a block of commands after a timed delay or at regular intervals.



### **Unit 2.2: Online Safety**

# Search

Look for information (in a database or the World Wide Web) using a search engine.

# Display Board

In Purple Mash, this is a tool that enables you to share work with a wide audience.

# Internet

A way to send information from one computer to another anywhere in the world using technology such as phones, satellites and radio links.

# Sharing

Post or repost (something) on a website.

# **Email**

Messages distributed by electronic means from one computer user to one or more people.

# **Attachment**

A digital file sent with an email.

# **Digital Footprint**

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

### **Unit 2.3: Spreadsheets**

# Backspace key

Use this key to delete the character before the current cursor position.

# Copy and Paste

A way to copy information from the screen into the computer's memory and paste it elsewhere without re-typing.

# Columns

Vertical reference points for the cells in a spreadsheet.

# Cells

An individual section of a spreadsheet grid. It contains data or calculations.

# **Count Tool**

In 2Calculate, this counts the number of cells with a value that matches the value of the cell to the left of the tool.

# Delete key

Use this key to remove the contents of a cell.

# **Equals** tool

Tests whether the entered calculation in the cells to the left of the tool has the correct answer in the cell to the right of the tool.

# **Image Toolbox**

Use this to insert images into cells.

# Lock tool

This tool prevents cell values being changed.

# Move cell tool

This tool makes a cell's contents moveable by dragand-drop methods.

# Rows

Vertical reference points for the cells in a spreadsheet.

# Speak Tool

This tool will speak the contents of a cell containing a number each time the value changes.

# Spreadsheet

A computer program that represents information in a grid of rows and columns.



### **Unit 2.4: Questioning**

# **Pictogram**

A diagram that uses pictures to represent data.

# **Question**

A sentence written or spoken to find information.

# Data

Facts and statistics collected together that can provide information.

# Collate

Collect and combine (texts, information, or data).

# **Binary Tree**

A simple way of sorting information into two categories.

# Avatar

An icon or figure representing a person in a video game, Internet forum or other online format.

# **Database**

A computerised system that makes it easy to search, select and store information.

### **Unit 2.5: Effective Searching**

# Internet

A global computer network providing a variety of information and communication facilities, consisting of interconnected networks and computers.

# Search

Look for information in a database or the World Wide Web using a search engine.

# Search Engine

A program that searches for and identifies items on the World Wide Web.



### **Unit 2.6: Creating Pictures**

# **Impressionism**

The impressionist movement began in the 1860s and became most popular in the 1870s and 1880s. It differed from the common art of the time because it was not religious art, showing scenes rom religious stories or specific events, but was just intended to capture a scene at a moment. The art gave an 'impression' of the scene.

# **Palette**

Within computer graphics, this is the range of colours or shapes available to the user.

# **Pointillism**

Pointillism was a development of impressionism. It was invented mainly by George Seurat and Paul Signac. Pointillist paintings are created by using small dots in different colours to build up the whole picture. Colours are placed near each other rather than mixed.

# Share

An instance of posting or reposting something on a social media website or application.

# Surrealism

Explored the subconscious areas o the mind. The artwork often made little sense as it was usually trying to depict a dream or random thoughts.

# **Template**

Something that serves as a model for others to copy.



# **Unit 2.7: Making Music**

# Bpm

The number of beats played in a minute.

# Instrument

An object or device for producing musical sounds.

# Soundtrack

A recording of the musical accompaniment of a film.

# Composition

A creative work, especially a poem or piece of music.

# Music

Vocal or instrumental sounds (or both) played alone or combined.

# Tempo

The speed at which a passage of music is, or should be, played.

# **Digitally**

By means of digital or computer technology.

# Sound Effects (Sfx)

A sound other than speech or music made artificially for use in a play, film, or piece of music.

# Volume

How loud a piece of music is.

### **Unit 2.8: Presenting Ideas**

# Concept Map (Mind Map)

A tool for organising and representing knowledge.
They form a web of ideas which are all interconnected.

# Node

A way to represent a concept or idea using text and/or images.

# **Narrative**

A speech or talk in which a new product, idea, or piece of work is shown and explained to an audience.

# Quiz

A test of knowledge, especially as a competition between individuals or teams as a form of entertainment.

# **Animated**

A process by which we see still pictures appear to move.

# **Audience**

The people giving attention to something.

# Presentation

A speech or talk in which a new product, idea, or piece of work is shown and explained to an audience.

# Non-Fiction

Informative or factual writing.



# **Computing Vocabulary - Year 3**

### **Unit 3.1: Coding**

#### Action

Types of commands, which are run on an object. They could be used to move an object or change a property.

#### **Alert**

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

#### Collision Detection

Detecting when two characters on the screen touch each other.

# Develop

The process of designing programs and writing code.

# **Nesting**

When you write a command inside something else e.g. a block of commands could be nested inside a timer.

# Plan

Set out what you would like the program to do before it is written.

# Repeat

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

### Sequence

When a computer program runs commands in order.

#### Scene

A visual aspect of a program.

# **Algorithm**

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

# Blocks of Command

A series of a few code instructions.

# Debug/Debugging

Looking for any problems in the code, fixing and testing them.

#### **Execute**

To run a computer program.

# **Object**

An element in a computer program that can be changed using actions or properties.

# **Predict**

Say what you think will happen when a piece of code is run.

# **Properties**

In 2Code, all objects have properties that can be changed in design or by writing code e.g. image, colour and scale properties.

### Sound

This is a type of output command that makes a noise.

# **Test**

When code is run to check that it works correctly.

### Background

The part of the program design that shows behind everything else. It sets the scene for the story or game.

#### **Button**

An object that can trigger an event in response to being clicked.

#### Command

A single instruction in a computer program.

#### **Event**

Something that causes a block of code to be run.

### **Flowchart**

A diagram which represents an algorithm.

# Output

Information that comes out of the computer e.g. sound.

### **Procedure**

A set of coded instructions that perform a certain task.

### **Timer**

Use this command to run a block of commands after a timed delay or at regular intervals.

# Values

Usually a number, a single character or a string of characters.



### **Unit 3.2: Online Safety**

#### **Password**

A secret word, phrase or combination of letters, numbers and symbols that must be used to gain admission to a site or application such as a website.

A global computer network providing a variety of information and communication facilities, consisting of interconnected networks and computers.

Internet

### Blog

A regularly updated website or web page, typically one run by an individual or small group, that is written in an informal or conversational style.

# Concept map

A diagram that shows how different objects or ideas are related and connected.

#### Username

An identification used by a person with access to a computer, network, or online service.

#### Website

A set of related web pages located under a single name.

# Webpage

A page online that makes up one screen of a website.

# Spoof website

Á website that uses dishonest designs to trick users into thinking that it represents the truth.

# **PEGI** rating

A rating that shows what age a game is suitable for.



### **Unit 3.3: Spreadsheets**

#### <>=

Symbols used to represent comparing two values. a < b means 'a is less than b'. a > b means 'a is greater than b'. a = b means 'a is equal to b'. These can be combined, for example a =< b means 'a is equal to or less than b'.

### Advance mode

A mode of 2Calculate in which the cells have references and can include formulae.

# Copy and Paste

A way to copy information from the screen into the computer's memory and paste it elsewhere without re-typing.

#### Columns

Vertical reference points for the cells in a spreadsheet.

#### Cells

An individual section of a spreadsheet grid. It contains data or calculations.

# Delete key

Use this key to remove the contents of a cell.

# **Equals tool**

Tests whether the entered calculation in the cells to the left of the tool has the correct answer in the cell to the right of the tool.

# Spin Tool

Clicking on this in a cell will increase or decrease the value in the cell to the right by 1.

### Move cell tool

This tool makes a cell's contents moveable by dragand-drop methods.

#### Rows

Vertical reference points for the cells in a spreadsheet.

# Spreadsheet

A computer program that represents information in a grid of rows and columns.

Any cell in the grid may contain either data or a formula that describes the value to be inserted based on the values in other cells.



# **Unit 3.4: Touch Typing**

#### **Posture**

The correct way to sit at the computer.

# Top row keys

The keys on the top row of the keyboard.

### Home row keys

The keys on the middle row of the keyboard.

### Bottom row keys

The keys on the bottom row of the keyboard.

# Space bar

The bar at the bottom of the keyboard.

#### Unit 3.5: Email

#### Communication

The sharing or exchanging of information by speaking, writing, or using some other medium such as email.

#### **Email**

Messages sent by electronic means from one device to one or more people.

# Compose

To write or create something.

#### Send

To make an email be delivered to the email address it is addressed to.

#### CC

A way of sending a copy of your email to other people so they can see the information in it.

### **Attachment**

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

# **Formatting**

Allows you to change the way the text of an email looks. For example, you can make the text bold or underline it.

# Report to the teacher

A way in 2Email to tell the teacher if you have received an email that makes you feel upset or scared.

### **Password**

A secret word, phrase or combination of letters, numbers and symbols that must be used to gain admission to a site or application such as email.

### Address book

A list of people who you regularly send an email to.

### Save to draft

Allows you to save an email that you are working on and send it later.



# **Unit 3.6: Branching Databases**

# Branching database

A way to sort information by asking questions that are normally answered 'yes' or 'no'.

#### Data

Facts and statistics collected together for information.

#### **Database**

A collection of data organised in such a way that it can be searched, and information found easily. Database usually refers to data stored on computers.

#### Question

Something that is asked or written to try and gain information.

#### **Unit 3.7: Simulations**

# Simulation

A computer simulation is a program that models a reallife situation. They let you try things out that would be too difficult or dangerous to do in real life.

# **Unit 3.8: Graphing**

# Graph

A diagram showing the value of objects.

### Field

A part of a record.

#### Data

Facts and statistics collected together for reference

# **Bar chart**

A graph in which the numerical amounts are shown by the height or length of lines or rectangles of equal width.

# Block graph

A graph where a block represents one item.

# Line graph

A graph where a line is used to show an amount.



# Unit 3.9: Presenting with Microsoft PowerPoint / Google Slides

#### **Animation**

Visual effects used on objects such as text boxes or pictures. They allow these objects to be bought on and off the slide in a certain way.

#### **Audio**

Any type of sound, such as music or voiceover.

# **Design Templates**

A variety of ready-made templates with custom formatting (font, colour scheme etc.) which gives a certain look and feel.

# **Entrance Animation**

The animation used to bring an object (such as a picture or text box) onto the slide.

#### **Font**

A set of type which shows words and numbers in a particular style and size.

#### Media

Images, videos or sounds which can be added to a presentation.

#### **Presentation**

A visual way of displaying information to an audience that is clear and engaging. It can contain text, images and videos.

# Presentation Program

A computer program, such as PowerPoint, which is used to create a presentation.

### Slide

A single page within a presentation.

### Slideshow

A collection of pages arranged in sequence that contains text and images to present to an audience.

Often referred to as a PowerPoint presentation.

# Stock Image

Existing photos and images which are available and free to use.

### **Text Box**

A box in which text can be inputted and formatted.

# **Text Formatting**

When you change the format of text on a page, including the font, the size and whether it is bold, underlined or in italics.

### **Transition**

The interesting effect used when one slide moves onto the next.



# Computing Vocabulary - Year 4

### Unit 4.1: Coding

#### Action

Types of commands, which are run on an object. They could be used to move an object or change a property.

#### **Button**

An object that can trigger an event in response to being clicked.

# Debug/Debugging

Looking for any problems in the code, fixing and testing them.

#### If/Else

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.

# Objects Types

The visual components within 2Code that have different properties and different actions to respond to events.

# Prompt for Input

A code command that visually presents the user with text.

## Repeat Until

This command can be used to make a block of commands run until something certain happens.

# **Timer**

Use this command to run a block of commands after a timed delay or at regular intervals.

#### **Alert**

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

#### Code Block

An individual code command represented visually by a block on the screen.

#### Execute

To run a computer program.

#### **Flowchart**

A diagram which represents an algorithm.

# Nesting

When you write a command inside something else e.g. a block of commands could be nested inside a timer.

### **Predict**

Say what you think will happen when a piece of code is run.

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

### Selection

This is a conditional/decision command. When selection is used, a program will choose a different outcome depending on a condition.

# Variable

A named area in computer memory. A variable has a name and a value. The program can change this variable value.

# Background

The part of the program design that shows behind everything else. It sets the scene for the story or game.

#### Command

A single instruction in a computer program.

#### Co-ordinates

Numbers which determine the position of a point, shape or object in a particular space.

A conditional command. This tests a statement. If the condition is true, then the commands inside the block will be run.

#### Number Variable

A variable that is numerical.

### Prompt

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

# **Properties**

In 2Code, all objects have properties that can be changed in design or by writing code e.g. image, colour and scale properties.

### Variable Value

In 2Code, this can be a string (test) a number or a function. It can be changed by the code and is stored in machine memory for the duration of the program.



### **Unit 4.2: Online Safety**

# Computer 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.

#### 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.

# Copyright

When the rights to something belong to a specific person.

# Digital footprint

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

#### **Email**

Messages sent by electronic means from one device to one or more people.

# Identity theft

When a person pretends to be someone else.

#### Malware

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

# 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.

### **Plagiarism**

When you use someone else's words or ideas and pass them off as your own.

# Spam

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



### **Unit 4.3: Spreadsheets**

## Average

A feature that allows a user to find the average values of selected cells.

# Columns

Vertical reference points for the cells in a spreadsheet.

# Equals tool

Tests whether the entered calculation in the cells to the left of the tool has the correct answer in the cell to the right of the tool.

### Move cell tool

This tool makes a cell's contents moveable by dragand drop methods.

# Spin Tool

Adds or subtracts 1 from the value of the cell to its right.

#### Advance mode

A mode of 2Calculate in which the cells have references and can include formulae.

#### Cells

An individual section of a spreadsheet grid. It contains data or calculations.

#### **Formula**

Use the formula wizard or type into the formula bar to create a formula in a cell, this will calculate the value for the cells based upon the value of other cells in the spreadsheet.

### Random tool

Click to give a random value between 0 and 9 to the cell.

# **Spreadsheet**

A computer program that represents information in a grid of rows and columns.

Any cell in the grid may contain either data or a formula that describes the value to be inserted based on the values in other cells.

# Copy and Paste

A way to copy information from the screen into the computer's memory and paste it elsewhere without re-typing.

#### Charts

Use this button to create a variety of graph types for the data in the spreadsheet.

#### Formula Wizard

The wizard guides you in creating a variety of formulae for a cell such as calculations, totals, averages, minimum and maximum for the selected cells.

#### Rows

Vertical reference points for the cells in a spreadsheet.

# **Timer**

When placed in the spreadsheet, click the timer to adds 1 to the value of the cell to its right every second until it is clicked again.



# **Unit 4.4: Writing for Different Audiences**

#### **Font**

The style of writing one can uses when typing on a document.

#### Bold

The make the text stand out.

#### Italic

A style of formatting when the text is at an angle.

#### **Underline**

To draw a line underneath the font.

# Unit 4.5: Logo

#### LOGO

A text-based coding language used to control an onscreen turtle to create mathematical patterns.

#### BK

Move backwards a distance of units.

#### FD

Move forward a distance of units.

#### RT

Turn right a given number of degrees.

#### LT

Turn left a given number of degrees.

#### **REPEAT**

Repeat a set of instructions a specified number of times.

#### SETPC

Set pen colour to a given colour.

#### SETPS

Set the pen thickness.

#### PU

Lift the pen up off the screen.

#### PD

Put the pen back down on the screen.



#### **Unit 4.6: Animation**

#### **Animation**

A process by which still pictures appear to move.

# **Flipbook**

A book with pictures drawn in a way that makes them appear to move when the pages are flicked.

# Play

Press this button to make the animation start.

# Background

A non-moving image that appears behind the animated images.

# Onion skinning

A process where the shadow image of the previous frame is present to help you line up the objects of the animation correctly.

#### Sound

Music or oral effects that can be added to the animation.

#### **Frame**

A single image in an animation.

# Stop motion

A technique whereby the camera is repeatedly stopped and started, for example to give animated figures the impression of movement.

# Video clip

A short piece of film or animation.

## **Unit 4.7: Effective Searching**

# Easter egg

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

#### Search

To look for information. In this case on the Internet.

#### Website

A set of related web pages located under a single domain name.

#### Internet

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

# Search engine

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

## Internet browser

A software application used to locate and display Web pages.

# Spoof website

Website spoofing is the act of creating a website, as a hoax, with the intention of misleading readers that the website has been created by a different person or organisation.



# **Unit 4.8: Hardware Investigators**

#### Motherboard

A printed circuit board containing the main parts of a computer or other device, with connectors for other circuit boards to be slotted into.

#### **CPU**

The part of a computer in which operations are controlled.

#### RAM

Allows programs to store information to help the computer run more quickly.

# Graphics card

A printed circuit board that controls the output to a display screen.

#### Network card

An electronic device that connects a computer to a computer network.

#### Monitor

A screen which displays an image generated by a computer.

### Speakers

A device for letting you hear sounds generated by the computer.

# Keyboard and mouse

External devices.

# Unit 4.9 - Making Music

#### Pitch

How high or low the sound of a note is.

How slow or fast a piece of

# Rhythm

A pattern of long and short sounds and silences.

How loud or quiet a sound

#### **Pulse**

The steady beat of a piece of music.

# Tempo

music is.

# **Dynamics**

# Melody

A sequence of notes which make up a tune.

# Rippler

The tool which when clicked, begins the ripple of sound.

# House Music

A style of electronic disco music which uses a range of different beats and synth sounds.

#### **Texture**

The way that different sounds and music elements are layered together to create a piece of music.



# **Computing Vocabulary - Year 5**

### **Unit 5.1: Coding**

#### Action

Types of commands, which are run on an object. They could be used to move an object or change a property.

#### **Button**

An object that can trigger an event in response to being clicked.

# **Decomposition**

A method of breaking down a task into manageable components. This makes it easier as the components can be then be coded seperately and then brought back together.

# **Nesting**

When you write a command inside something else e.g. a block of commands could be nested inside a timer.

# Repeat

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

### Run

To cause the instruction in a program to be carried out.

# Simplify/Simplified

To make something easier.

#### Tab

In 2Code, this is a way to organise a program into separate pages (tabs) of code.

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#### Abstraction

A way of de-cluttering and removing unnecessary details to get a program functioning.

#### Called

A line of code that triggers a function to be executed.

#### **Event**

Something that causes a block of code to be run.

#### **Function**

A block or sequence of code that you can access when you need it, so you don't have to rewrite the code repeat it. Instead you simple 'call' the function each time you want it.

# Physical System

A system or process which happen in the real world using robotics, sensors or motors e.g. traffic lights.

#### Score

A record of points won or lost in a game.

# Simulation

A model that represents a real or imaginary situation.

### **Timer**

Use this command to run a block of commands after a timed delay or at regular intervals.

### **Algorithm**

Types of commands, which are run on an object. They could be used to move an object or change a property.

#### Co-ordinates

Numbers which determine the position of a point, shape or object in a particular space.

#### If

A conditional command. This tests a statement. If the condition is true, then the commands inside the block will be run.

# Object

An element in a computer program that can be changed using actions or properties.

# **Properties**

In 2Code, all objects have properties that can be changed in design or by writing code e.g. image, colour and scale properties.

# Sequence

This is when a computer program runs commands in order. In 2Code this can also include "repeat" or a timer.

## Variable

A named area in computer memory. A variable has a name and a value. The program can change this variable value.



# **Unit 5.2: Online Safety**

# Online safety

Refers to staying safe when having a presence online.

#### **Smart rules**

A set of rules based around the word SMART designed to help you stay safe when online.

#### **Password**

A string of characters that allows access to a computer system or service.

# Reputable

Having a good reputation.

# **Encryption**

The process of converting information or data into a code, especially to prevent unauthorized access.

# Identity theft

The practice of using another person's name and personal information in order to obtain credit, loans, etc.

# Shared image

A picture that is shared online for other people to see.

### **Plagiarism**

The practice of taking someone else's work or ideas and passing them off as one's own.

# Citations

A quotation from or reference to a book, paper, or author, especially in an academic work.

#### Reference

A mention of a source of information in a book or article including online.

# **Bibliography**

A list of all the books and articles used in a piece of work.

# **Unit 5.3: Spreadsheets**

### **Average**

A feature that allows a user to find the average values of selected cells.

#### Advance mode

A mode of 2Calculate in which the cells have references and can include formulae.

# Copy and Paste

A way to copy information from the screen into the computer's memory and paste it elsewhere without re-typing.

#### Columns

Vertical reference points for the cells in a spreadsheet.

#### Cells

An individual section of a spreadsheet grid. It contains data or calculations.

#### Charts

Use this button to create a variety of graph types for the data in the spreadsheet.

### Equals tool

Tests whether the entered calculation in the cells to the left of the tool has the correct answer in the cell to the right of the tool.

#### **Formula**

Use the formula wizard or type into the formula bar to create a formula in a cell, this will calculate the value for the cells based upon the value of other cells in the spreadsheet.

#### Formula Wizard

The wizard guides you in creating a variety of formulae for a cell such as calculations, totals, averages, minimum and maximum for the selected cells.

# Move cell tool

This tool makes a cell's contents moveable by drag and-drop methods.

# Random tool

Click to give a random value between 0 and 9 to the cell.

#### Rows

Vertical reference points for the cells in a spreadsheet.

# Spin Tool

Adds or subtracts 1 from the value of the cell to its right.

# Spreadsheet

A computer program that represents information in a grid of rows and columns.

Any cell in the grid may contain either data or a formula that describes the value to be inserted based on the values in other cells.

### **Timer**

When placed in the spreadsheet, click the timer to adds 1 to the value of the cell to its right every second until it is clicked again.



#### **Unit 5.4: Databases**

#### **Avatar**

An icon or figure representing a person in a video game, Internet forum, etc.

# Binary tree (branching database)

A way to sort information by dividing the information into groups based upon questions with yes or no answers.

#### Charts

Representing information in a pictorial form.

#### Collaborative

Produced by, or involving, two or more parties working together.

#### Data

Facts and statistics collected together for information.

#### **Database**

A set of data that can be held in a computer in a format that can be searched and sorted for information.

#### **Find**

Search for information in a database.

#### Record

A collection of data about one item entered into a database.

# Sort, Group and Arrange

Different ways to sort information in a database so it is easy to read, understand and interpret.

# Statistics and reports

To produce information about data in a database.

#### Table

Sorting information into rows and columns.



#### **Unit 5.5: Game Creator**

#### Animation

Creating an illusion of movement.

### Computer game

A game played using a computer, typically a video game.

#### **Customise**

Modify (something) to suit an individual or task.

#### **Evaluation**

The making of a judgement about the value of something.

### **Image**

In this case, a picture displayed on the computer screen.

### Instructions

Detailed information about how something should be done or operated.

#### Interactive

Responding to a user's input on a computer or device.

#### Screenshot

An image of the data displayed on the screen of a computer or mobile device.

#### **Texture**

High frequency detail or colour information on a computer-generated graphic.

# **Perspective**

Representing three-dimensional objects on a twodimensional surface to give the right impression of their height, width, depth, and position in relation to each other.

# **Playability**

A measure of either the ease by which a video game may be played, or of the overall quality of its gameplay.



### Unit 5.6: 3D Modelling

#### CAD

Computer aided Design – A CAD computer program or app allows you to design a 3D object or environment in 2D and visualise it in 3D on the screen from many

angles.

#### 2D

Something that has only two dimensions; height and width.

#### **Points**

An exact position or location on a 2Dsurface.

# Modelling

The activity of making models.

# Viewpoint

A person's opinion or physical point of view.

#### Net

A pattern that you can cut and fold to make a model of a solid shape.

# **Template**

Something that serves as a model for others to copy.

#### 3D

Something that has three dimensions; height, width and depth.

# Polygon

An object with at least three straight sides and angles, and typically five or more.

# 3D Printing

The action or process of making a physical object from a three-dimensional digital model, typically by laying down many thin lavers of a material in succession.

### **Unit 5.7: Effective Searching**

### **Audience**

People giving attention to something.

# Concept Map

A tool for organising and representing knowledge. They form a web of ideas which are all interconnected.

#### Node

A way to represent concepts or ideas.

# Collaboratively

Something that is produced by, or involves, two or more parties working together.

# Connection

A relationship or link between two nodes or ideas.

## Thought

An idea or opinion produced by thinking or occurring suddenly in the mind.

# Concept

An idea.

#### Idea

An opinion or belief.

# Visual

A picture, piece of film or display used to illustrate or accompany something.



# Unit 5.8: Word Processing with Microsoft Word / Google Docs

# Copyright

When an image, logo or idea has a legal right to not be copied or used without the owner's permission.

#### Cursor

The flashing vertical line that shows your place in a Word document.

#### **Document**

A type of file which shows written information and/or images and sometimes charts and tables.

#### **Font**

A set of type which shows words and numbers in a particular style and size.

# In-built styles

A bank of ready-made styles which you can use to make sure your style (font, header, spacing, size etc) is consistent throughout the document.

### Merge cells

A tool you can use when making a table to join cells which are next to each other in columns or rows.

# Paragraph formatting

When you change the format of the text in a paragraph, including how the text is aligned and spaced.

# Readability

How easy and pleasant it is to read and understand a document.

# **Template**

A ready-made outline of a document you might want to adapt, such as a letter or certificate.

# Text formatting

When you change the format of text on a page, including the font and the size and whether it is bold, underlined or in italics.

# Text wrapping

A feature which helps you place and position an image neatly on a page or within a paragraph of text.

# **Word Art**

A way to treat text as a graphic so that you can add special effects to text.

# Word Processing tool

A programme which allows you to write, edit and print different documents.



# Computing Vocabulary - Year 6

## **Unit 6.1: Coding**

#### Action

Types of commands, which are run on an object. They could be used to move an object or change a property.

# Background

The part of the program design that shows behind everything else. It sets the scene for the story or game.

# Debug/Debugging

Looking for any problems in the code, fixing and testing them.

# **Decomposition**

A method of breaking down a task into manageable components. This makes it easier as the components can be then be coded seperately and then brought back together.

# Get Input

This puts the text that a user types into the computer's temporary memory to be used to control the program flow.

# Number Variable

A variable that is numerical.

### **Predict**

Say what you think will happen when a piece of code is run.

#### **Alert**

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

#### **Button**

An object that can trigger an event in response to being clicked.

#### Command

A single instruction in a computer program.

# Developer

A person who writes, debugs and executes code to create a program.

### **Flowchart**

A diagram which represents an algorithm.

# If/Else

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.

# **Nesting**

When you write a command inside something else e.g. a block of commands could be nested inside a timer.

# **Algorithm**

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

#### Called

A line of code that triggers a function to be executed.

#### Co-ordinates

Numbers which determine the position of a point, shape or object in a particular space.

#### **Event**

Something that causes a block of code to be run.

### **Function**

A block or sequence of code that you can access when you need it, so you don't have to rewrite the code repeat it.
Instead you simple 'call' the function each time you want it.

### Launch Command

A command that launches another program within an existing program.

# **Object**

An element in a computer program that can be changed using actions or properties.

### **Procedure**

A set of coded instructions that perform a certain task.



# **Unit 6.1: Coding (continued)**

# **Prompt**

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

#### Run

To cause the instruction in a program to be carried out.

#### Simulation

A model that represents a real or imaginary situation.

#### **Timer**

Use this command to run a block of commands after a timed delay or at regular intervals.

# **Properties**

All objects have properties that can be changed in design or by writing code e.g. image, colour and scale properties.

#### Scene

A visual aspect of a program.

### String

A sequence of characters, which could form words, phrases or even whole sentences.

# **User Input**

When a program requires an input from a user such as a click or text from a keyboard.

# Repeat

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

#### Selection

This is a conditional/decision command. When selection is used, a program will choose a different outcome depending on a condition.

#### Tab

In 2Code, this is a way to organise a program into separate pages (tabs) of code.

#### Variable

A named area in computer memory. A variable has a name and a value. The program can change this variable value.

# **Unit 6.2: Online Safety**

# Digital footprint

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

# Phishing

The 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.

#### Password

A string of characters that allow access to a computer system or service.

## Screen time

Time spent using a device such as a computer, television, or games console.

# **PEGI** rating

A rating that shows what age a game is suitable for.

# Spoof website

A website that uses dishonest design to trick users into thinking that it represents the truth.



# **Unit 6.3: Spreadsheets**

# Average function

A feature that allows a user to find the average values of selected cells.

#### Columns

Vertical reference points for the cells in a spreadsheet.

# Count (how many) tool

Counts the number of whatever value object is in the cell to its immediate left and puts the answer in the cell to its immediate right.

#### **Formula**

Use the formula wizard or type into the formula bar to create a formula in a cell, this will calculate the value for the cells based upon the value of other cells in the spreadsheet.

# Random tool

Click to give a random value between 0 and 9 to the cell.

# Spreadsheet

A computer program that represents information in a grid of rows and columns.

Any cell in the grid may contain either data or a formula that describes the value to be inserted based on the values in other cells.

#### Advance mode

A mode of 2Calculate in which the cells have references and can include formulae.

#### Cells

An individual section of a spreadsheet grid. It contains data or calculations.

#### Dice

When clicked, this will simulate a dice roll by switching to one of the faces of a die.

#### Formula Wizard

The wizard guides you in creating a variety of formulae for a cell such as calculations, totals, averages, minimum and maximum for the selected cells.

# Rows

Vertical reference points for the cells in a spreadsheet.

# **Timer**

When placed in the spreadsheet, clicking the timer adds 1 to the value of the cell to its right every second until it is clicked again.

# Copy and Paste

A way to copy information from the screen into the computer's memory and paste it elsewhere without re-typing.

#### Charts

Use this button to create a variety of graph types for the data in the spreadsheet.

# **Equals** tool

Tests whether the entered calculation in the cells to the left of the tool has the correct answer in the cell to the right of the tool.

### Move cell tool

This tool makes a cell's contents moveable by drag and-drop methods.

# Spin Tool

Adds or subtracts 1 from the value of the cell to its right.



#### **Unit 6.4: Databases**

#### **Audience**

In this case, the readership of the blog.

# Blog

A regularly updated website or web page, typically one run by an individual or small group, that is written in an informal or conversational style.

# Blog page

A webpage onto which blog posts are hosted.

# Blog post

A piece of writing or other item of content published on a blog.

#### Collaborative

Produced by or involving two or more parties working together.

#### Icon

A symbol or graphic representation on a screen.

#### **Unit 6.5: Text Adventures**

# Text-based adventure

A computer game that uses text instead of graphics.

# Concept map

A tool for organising and representing knowledge.
They form a web of ideas which are all interconnected.

## Debug

Identify and remove errors from (computer hardware or software).

# Sprite

A computer graphic which may be moved on-screen.

### **Function**

In this context, a section of code that gets run when it is called from the main code. A function in a program is usually a piece of code that gets run lots of times.



#### **Unit 6.6: Networks**

#### Internet

A global computer network providing a variety of information and communication facilities, consisting of interconnected networks using standardized communication protocols.

### World Wide Web

An information system on the Internet which allows documents to be connected to other documents by hypertext links, enabling the user to search for information by moving from one document to another.

#### **Network**

Several interconnected computers, machines, or operations.

#### Router

A device which forwards data packets to the appropriate parts of a computer network.

### Network cables

Used to connect and transfer data and information between computers and routers.

# Wireless

The ability to transmit data from one device to another without using wires.

# Local Area Network (LAN)

A computer network that links devices within a building or group of adjacent buildings, especially one with a radius of less than 1 km.

# Wide Area Network (WAN)

A computer network in which the computers connected may be far apart, generally having a radius of more than 1 km.

# **Unit 6.7: Quizzing**

#### **Audience**

The people giving attention to something.

# Database

A structured set of data held in a computer, especially one that is accessible in various ways.

# Collaboration

The action of working with someone to produce something.

### Quiz

A test of knowledge, especially as a competition between individuals or teams as a form of entertainment.

# Concept map

A tool for organising and representing knowledge.
They form a web of ideas which are all interconnected.



# Unit 6.8: Binary

#### Base 10

The number system commonly used in day-to-day life. Using the digits 0,1,2,3,4,5,6,7,8,9 to make all number values. Also known as decimal or denary.

#### Bit

A single 0 or 1 in the binary system.

### Denary

See Base-10.

# Integer

Any whole number. This includes negative and positive numbers but not fractions or decimals.

Megabyte (MB) 1024 KB.

Tetrabyte (TB) 1024 GB.

#### Base 2

A number system based only on the numerals 0 and 1. Also known as binary. The digits 1 and 0 used in binary reflect the on and off states of transistors.

# **Byte**

8 bits.

### Digit

A single integer used to show a number.

# Kilobyte (KB)

1024 bytes.

### **Nibble**

4 bits.

### **Transistor**

A tiny switch that is activated by the electronic signals it receives.

# Binary

See Base-2.

#### Decimal

See Base-10.

# Gigabyte (GB)

#### Machine code

The code that signals to a computer which transistors should be on or off. Machine code is written in binary.

#### Switch

A component that can be one of two states at any time: on or off.

#### Variable

A variable is used in programming to keep track of things that can change while a program is running. A variable must have a name. The value of the variable is the information to store.



# Unit 6.9: Spreadsheets with Microsoft Excel / Google Sheets

# **Alignment**

How the contents of a cell is lined up and arranged.

#### Cell reference

The letter and number combination which shows a cells location on the page.

#### Calculate

Excel's ability to complete calculations in a cell by using the = sign.

#### Chart

A tool which is used to display information in the form of a chart or graph.

#### Formula(e)

A group of letters, numbers or other symbols which represent a mathematical rule. It allows Excel to carry out calculations quickly.

### Range

A collection of selected cells. E.g. all the numbers you want to appear in a calculation.

# Style

How the contents of a cell is presented.

#### Value

What the data in a cell represents. This could be certain text e.g. blue/green, a date or a number.

#### Row

The numbered rows going horizontally across the sheet.

#### Sum

A function which adds together the totals in a range of cells.

### Workbook

A file can contain more than one 'sheet'. The complete file is called a spreadsheet workbook.

#### Cell

Each box on a spreadsheet is a cell. It can contain a variety of data such as letters, numbers, symbols and calculations.

#### Column

The letter labelled columns going vertically down the sheet.

#### **Function**

Ready-made mathematical formulas which help you quickly carry out calculations.

# Spreadsheet

The main part of the page of a software tool used to organise information.

# Text wrapping

This displays the cells contents on multiple lines rather than one long line, allowing all the contents to be shown.

