Computing Vocabulary All Years

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Year 1

Unit 1.1: Online Safety and Exploring Purple Mash

- **Alert:** A system that lets you know if you have something to look at.
- **Avatar:** A digital picture to represent someone.
- **Button:** An area where you click to make something happen.
- **Device:** A piece of electrical equipment made for a purpose.
- **File Name:** The name given to an online piece of work.
- **Filter:** A way of removing information you are not interested in.
- **Home Screen:** The home screen of a website is like the front page and contents page of a book.
- **Icon:** An image on a web page that you can click on to navigate to somewhere.
- **Login:** Using a username and password to access a system.
- **Log out:** Leaving a computer system.
- **Menu:** A button which gives the user different options.
- **My Work Area:** The place on Purple Mash where your work is stored. Only you and your teachers can access this.
- **Notification:** A message telling you about something.
- **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.
- **Private:** Keeping information restricted from other people.
- **Purple Mash Tools:** A selection of programs which help you carry out different tasks.
- **Saving:** Store your work as you create something so it can be accessed later.
- **Search:** A way of finding specific resources you want to look at.
- **Shared Folder:** An area to save your work that everyone in the class can use.
- **Textbox:** A box in which to add words.
- **Think About Box:** Information in a writing template which give you ideas on what to write.
- **Topic Area:** A place on Purple Mash where you find activities all about something you are learning about.
- **Tool bar:** A strip of icons that can be clicked to perform different functions.
- **Typing:** The action of writing something on a computer.
- **Writing Template:** A guide which a writer follows when doing some writing.

Unit 1.2: Grouping and Sorting

- **Activities:** Tasks you do and complete.
- **Criteria:** A way in which something is judged.
- **Describe**: To give a detailed account of something.
- **Equal**: When two amounts are the same.
- **Groups**: Objects arranged and put together because they have features in common.
- **Less than**: When an amount is smaller than another amount.
- **More than**: When an amount is bigger than another amount.
- **Sort**: Put things together by features they have in common.

Unit 1.3: Pictograms

- **Collect Data:** Gathering facts and information.
- **Compare:** Looking at what is the same and what is different.
- **Data:** A collection of information, used to help answer questions.
- **Pictogram:** A diagram that uses pictures to represent data.
- **Record Results:** Writing down what you have found out.
- **Title:** The name given to a piece of work.
- **Totals:** The whole number or amount of something.
- **Visual:** Using your eyes to see something.

Unit 1.4: Lego Builders

- **Algorithm:** a precise, step-by-step set of instructions used to solve a problem or achieve an objective.
- **Code:** Instructions that a programmer enters into a computer that cause the computer to perform a certain way.
- **Computer:** An electronic device for storing and processing data.
- **Debugging:** To find and remove errors from computer hardware or software.
- **Instructions**: detailed information about how something should be done or operated.
- **Machine:** A moving mechanical device made to do a task, making work easier for people.
- **Program:** An algorithm that has been coded into something that can be run by a machine, e.g., a computer or a robot.
- **Recipe:** A set of instructions which describes how to prepare a dish of food.
- **Sequence:** Putting things in an order which follows on from one thing to the next.

Unit 1.5: Maze Explorers

- **Algorithm**: a precise, step-by-step set of instructions used to solve a problem or achieve an objective.
- **Challenge:** A task to be completed.
- **Command:** An action such as left command.
- **Delete:** Removes something such as an instruction.
- **Direction:** The path that something travels. For example, a robot moving forwards, backwards or diagonal.
- **Instruction**: Detailed information about how something should be done or operated.
- **Left and Right:** A position which relates to something. For example, make the fish move left of the screen.
- **Route:** A path an object or thing takes to get somewhere.
- **Undo:** If we make a mistake, we can press the undo button.
- **Unit:** A unit such as make the turtle move 2 units (squares).

Unit 1.6: Animated Story Books

- **Animation:** An object that moves on screen.
- **Background:** An image inserted into a file that sits behind text, objects, or buttons.
- **Category:** A place where similar files are found. For example, Animals Category where animal images can be found.
- **Clip-art gallery:** A place in software such as 2Create a Story where a library of images can be found and inserted into a file.
- **Copy:** A feature that lets users copy things like text, images, sounds.
- **Drop-down menu:** A menu where a list of choices is displayed.
- **E-book:** A book that can be read on the computer or on a tablet.
- **Edit:** Edit means to change something. For example, change some text to improve it.
- **Eraser:** In some software like 2Create a Story, erasers are used to remove unwanted drawn images.
- **Features:** In 2Create a Story there are features such as animation and sound.
- **Font:** The style of text used in a piece of writing on a computer or tablet.
- **Sound:** Sounds can be uploaded into software from a file or created.
- **Overwrite:** When opening a previous file, users can make changes and save, which overwrites the file.
- **Paint tools:** Lets a user create drawings in software such as 2Create a Story.
- **Paste:** A feature that pastes copied items.
- **Play Mode:** A mode that plays a file such as 2Create a Story.
- **Redo:** If a user has clicked undo by mistake, they can click on redo.

- **Save:** Files such as 2Create a Story, can be saved in a folder so work isn't lost.
- **Sound effect:** A sound other than speech or music made for use in a play, film or computer file.
- **Text:** Words, letters, numbers or symbols entered into a computer, such as writing text in 2Create a Story.
- **Undo:** When a user makes a paint mark for example, this can be undone with the undo button.
- **Voice recording:** In software such as 2Create a story, users can record their voice and insert it into the file.

Unit 1.7: Coding

- **Action**: the way that objects change when programmed to do so. For example, move.
- **Algorithm**: a precise, step-by-step set of instructions used to solve a problem or achieve an objective.
- **Background**: In 2Code the background is an image in the design that does not change.
- **Click**: This describes the action of clicking a mouse pointer on the screen or tapping with a finger on a touch screen.
- **Code**: Instructions that a programmer enters into a computer that cause the computer to perform a certain way.
- **Code blocks**: A way to write code using blocks which each have an object or an action
- **Coding**: writing instructions that the computer can process (understand) to make programs (software).
- **Code view:** The view in 2Code that shows the coding blocks used to make the program.
- **Command**: A single instruction in 2Code.
- **Debug\ Debugging:** Fixing code that has errors so that the code will run the way it was designed.
- **Design View**: The view in 2Code that shows what the program looks like to the user.
- **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 or clicking the screen. In 2Code, the event commands are used to create blocks of code that are run when events happen.
- **Execute**: This is the proper word for when you run the code. We say, 'the program (or code) executes.'
- **Instruction**: detailed information about how something should be done or operated.

- **Object**: Items in a program that can be given instructions to move or change in some way (action).
- **Output:** Information that comes out of the computer e.g. sound that comes out of the speakers.
- **Plan:** When coding, a plan means including the objects and actions into a written document that shows what the program should look like (the design) and what the objects should do (the actions).
- **Programmer**: A person who writes computer programs. Sometimes called a **coder**.
- **Properties**: These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.
- **Run**: This is what you do when you click the Play button in 2Code: The program runs.
- **Scale**: This is a property of an object that changes its size.
- **Scene**: In 2Code, this is the combination of the background and objects in a program.
- **Software**: The programs that run on a computer that are used by people to do things. For example, write, draw or play games.
- **Sound**: An output from the computer that makes a noise.
- **When Clicked:** An event command that is triggered when an object is clicked on.

Unit 1.9: Technology Outside School

- **Computer:** An electronic device for storing and processing data.
- **Technology:** Science and engineering knowledge put into practical use to solve problems or invent useful tools.

Year 2

Unit 2.1: Coding

- **Action**: The way that objects change when programmed to do so. For example, move.
- **Algorithm**: a precise, step-by-step set of instructions used to solve a problem or achieve an objective.
- **Background**: In 2Code the background is an image in the design that does not change.
- **Bug**: A problem in a computer program that stops it working the way it was designed.
- **Button**: A type of object that responds to being clicked on.
- **Click events:** An event that is triggered when the user clicks on an object.
- **Collision detection:** In 2Code, this measures whether 2 objects have touched each other.
- **Collision detection action:** The action that is programmed to happen once the objects collide.
- **Collision detection event**: The event of two objects colliding.
- **Command**: A single instruction in 2Code.
- **Debug\ Debugging:** Fixing code that has errors so that the code will run the way it was designed to.
- **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 or clicking the screen. In 2Code, the event commands are used to create blocks of code that are run when events happen.
- **Execute:** This is the proper word for when you run the code. We say, 'the program (or code) executes.'
- **Image**: A picture
- **Implement**: When a design is turned into a program using coding.
- **Instructions**: detailed information about how something should be done or operated.
- **Interaction**: When objects perform actions in response to each other e.g. a frog turning into a monkey when it collides with a tree.
- **Interval**: In a timer, this is the length of time between the timer code running and the next time it runs e.g. every 1 second.
- **Object**: Items in a program that can be given instructions to move or change in some way (action).

- **Object Name**: Every object in a 2Code program must have a unique name that is used to program actions and events for the object.
- **Output**: Information that comes out of the computer e.g. sound.
- **Predict**: Use your understanding of a situation to say what will happen in the future or will be a consequence of something.
- **Properties**: These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.
- **Run:** Clicking the Play button to make the computer respond to the code.
- **Scale**: This is a property of an object that changes its size.
- **Scene**: In 2Code, this is the combination of the background and objects in a program.
- **Sequence**: This is when a computer program runs commands in order.
- **Test**: To run the code and observe what happens to identify where there might be bugs in the program.
- **Text**: Written words or numbers. In 2Code some objects such as buttons have a text property which is the writing on the button.
- **Timer:** In coding, use a timer command to run a block of commands after a timed delay or at regular intervals.
- **Turtle Object**: A type of object in 2Code that moves by coding angles of rotation and distance to move.
- **When Clicked:** An event command that is triggered when an object is clicked on.
- **When Key Event:** An event triggered when a user presses a particular key on the keyboard.
- **When Swiped Event:** An event triggered when the user swipes a particular area of the screen e.g. the background (touch-screen devices only).

Unit 2.2: Online Safety

- **Attachment:** A computer file sent with an email.
- **Digital footprint:** The information about a person that exists on the Internet as a result of their online activity.
- **Display Board:** In Purple Mash, this is a tool that enables you to share work with a wide audience.
- **Email:** Messages distributed by electronic means from one computer user to one or more people.
- **Filter:** A feature of search engines, where a user can filter results according to criteria. For example, news, date published.
- **Identifying:** It's important that any information shared online doesn't have details that can identify someone such as their name and address.
- **Internet:** A way to send information from one computer to another anywhere in the world using technology such as phones, satellites and radio links.

- **Personal information:** This is information that is personal to someone. For example, their favourite food, their name and age.
- **Private information:** This is personal information that should be kept secure. For example, their date of birth, their full address, credit card numbers.
- **Protection:** Some places like schools, have systems in place that help to protect users from harmful content. However, it's important that anyone using online services should always behave carefully to help protect themselves and others.
- **Reply:** When someone receives an email, they can send a reply using the reply button.
- **Search:** Look for information (in a database or the World Wide Web) using a search engine.
- **Secure:** Users online should take steps to help keep their personal and private information secure.
- **Sharing:** Post or repost (something) on a website.

Unit 2.3: Spreadsheets

- **Addition:** The add symbol can be used in a cell when numbers are in the cells either side of it to create a sum.
- **Calculations:** Solving maths problems using one of the Four Operations, - addition, subtraction, division or multiplication.
- **Cell:** An individual section of a spreadsheet grid. It contains data or calculations.
- **Clipart:** A library of images that a user can choose from and insert in a file.
- **Coins:** In 2Calculate images that represent coins and have a value can be used in spreadsheets.
- **Column:** Boxes running vertically in a spreadsheet.
- **Count tool:** This counts the number of cells with a value that matches the value of the cell to the left of the tool.
- **Data:** A collection of information, used to help answer questions.
- **Data table:** An organised display of information laid out in rows and columns.
- **Delete:** Removes contents such as the contents in a cell.
- **Equals:** This symbol can be used in 2Calculate to find the answer to a calculation.
- **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.
- **Graph:** A way to represent data as an image.
- **Image**: A drawing or photograph saved as an electronic file.
- **Image value:** Images placed in cells can have values given to them. E.g., apple 1, pear 2 etc.
- **Move cell:** The move tool in 2Calculate lets a user move the contents of a cell to a new cell.
- **Price:** The cost of an item or items.
- **Row:** Boxes running horizontally in a spreadsheet

- **Select:** A user can select one or more cells and perform an action on them.
- **Spreadsheet:** A computer program that shows information in a grid of rows and columns.
- **Speak tool**: This tool will speak the contents of a cell containing a number each time the value changes.
- **Total:** The sum of something, using the addition operator (+).
- **Totalling tool:** Calculates the sum of all cells to the left, above or diagonally above it, dependent on which arrow direction is used.

Unit 2.4: Questioning

- **Avatar:** A digital picture to represent someone.
- **Binary Tree:** A simple way of sorting information into two categories.
- **Data:** A collection of information, used to help answer questions.

- **Database:** A computerised system that makes it easy to search, select and store information.
- **Field:** A single piece of data in a database which makes up a record.
- **Information:** Knowledge or facts that come from a source.
- **Pictogram:** A diagram that uses pictures to represent data.
- **Question:** A sentence written or spoken to find information.
- **Record:** An item in a database with a variety of information about a specific entry.
- **Search:** Looking for specific information. On a database, you can use the 'Find' tool.
- **Sort:** Put things together by features they have in common.

Unit 2.5: Effective Searching

- **Browser:** A tool to help us access the World Wide Web.
- **Device:** A piece of electrical equipment made for a purpose.
- **Digital Footprint:** the information about a particular person that exists on the internet as a result of their online activity.
- **Domain:** Part of the Internet owned by an individual, company or organisation.
- **Internet:** A way to send information from one computer to another anywhere in the world using technology such as phones, satellites and radio links.
- **Network:** Connected devices that can send and receive information, voice and video.
- **Search Engine:** A program to help you find web pages on the Internet.
- **URL:** Another word for web address
- **Web Address:** Identifying address for a file, or webpage on the Internet.
- **Web Page:** A single page which can include images, videos and charts.
- **Web Site:** A collection of webpages that belong to one domain.

- **World Wide Web:** The web pages and documents you see when you are browsing online. It is just one part of the Internet.

Unit 2.6: Creating Pictures

- **Art:** A visual form of creative activity and imagination.
- **Clipart:** Premade graphical images.
- **Diagonal:** A slanted straight line.
- **Dilute:** When you add water to a liquid to make it thinner. In the case of adding water to paint, it makes the colour weaker/lighter.
- **eCollage:** A 2Paint A Picture template style where the picture is made by creating stamps that can then be placed on the picture.
- **Fill:** Causing an area to become full, in this case, of colour.
- **Horizontal:** A line or shape which goes in the direction of side to side.
- **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 wasn't religious art, showing scenes from religious stories or specific events, but was just intended to capture a scene at a moment. The art gave an 'impression' of the scene.
- **Line:** A long and narrow mark.
- **Palette:** Within computer graphics, this is the range of colours or shapes available to the user.
- **Parallel:** Lines that run side by side that never meet.
- **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.
- **Repeating pattern:** A decorative design that is shown again and again.
- **Rotated:** When the position of an image is moved around in the direction of a circle.
- **Stamps:** The image box in the template which contains the design used and repeated in the artwork.
- **Style:** A particular way in which something looks or is formed.
- **Surrealism:** Artwork which explored the subconscious areas of the mind. The artwork often made little sense as it was usually trying to depict a dream or random thoughts.
- **Symmetry:** Something is symmetrical when it has two matching halves; the same on both sides.
- **Vertical:** A line or shape that goes in the direction top to bottom.

Unit 2.7: Making Music

- **Bars:** A way of measuring the length of music.
- **Beat:** A rhythmic unit in music.
- **Compose:** To create a piece of music.
- **Note**: A single tone in music.
- **Tune:** Musical notes joined together to make a melody.
- **Repeat:** Play the music again.
- **Sound Effect:** A sound other than speech or music.
- **Soundtrack:** A recording of the musical accompaniment of a film or tv programme.
- **Speed:** The number of beats per minute played in the music.
- **Tempo:** The speed at which the music plays.
- **Volume:** How loud or quiet the music is.

Unit 2.8: Presenting Ideas

- **E-book:** An electronic version of a printed book that can be read on a computer or a specifically designed handheld device.
- **Fact file:** A document containing all the important information about one subject.
- **Fiction:** A book or story that is written about imaginary characters and events and not based on real people or places.
- **Mind Map:** A tool for organising and representing knowledge. They form a web of ideas which are all interconnected.
- **Multiple-choice:** A question type with several possible answers given where the user has to choose the correct answer or answers.
- **Node:** A way to represent a concept or idea using text and/or images.
- **Non-fiction:** Writing that is about real people or events rather than stories that have been made up.
- **Presentation:** A way of displaying information about a subject to an audience.
- **Quiz:** A test of knowledge, especially as a competition between individuals or teams as a form of entertainment.

Year 3

Unit 3.1: Coding

- **Action**: The way that objects change when programmed to do so. For example, move or change a property.
- **Alert**: This is a type of output. It shows a pop up of text on the screen.
- **Algorithm**: a precise, step-by-step set of instructions used to solve a problem or achieve an objective.
- **Background**: In 2Code the background is an image in the design that does not change.
- **Bug**: A problem in a computer program that stops it working the way it was designed.
- **Button**: A type of object that responds to being clicked on.
- **Click events:** An event that is triggered when the user clicks on an object.
- **Code:** Writing the code for a computer program.
- **Collision detection event**: The event of two objects colliding.
- **Command**: A single instruction in 2Code.
- **Debug\ Debugging:** Fixing code that has errors so that the code will run the way it was designed to.
- **Degrees**: A measurement of a turn. A full turn has 360 degrees; written as 360°.
- **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.
- **Flowchart**: A diagram that uses specifically shaped, labelled boxes and arrows to represent an algorithm as a diagram.
- **Implement**: When a design is turned into a program using coding.
- **Input**: Information going into the computer. Can include moving or clicking the mouse, using the keyboard, swiping and tilting the device.
- **Interval**: In a timer, this is the length of time between the timer code running and the next time it runs e.g. every 1 second.
- **Nest**: When coding commands are put inside other commands. These commands only run when the outer command runs.
- **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.
- **Properties**: These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.
- **Repeat:** This **command** can be used to make a **block of commands run** a set number of times or forever.

- **Right-Angle:** This is a term that describes an angle of 90°, as in a corner of a square, or formed by dividing a circle into quarters.
- **Run:** Clicking the Play button to make the computer respond to the code.
- **Scene**: In 2Code, this is the combination of the background and objects in a program.
- **Sequence**: This is when a computer program runs commands in order.
- **Test**: To run the code and observe what happens to identify where there might be bugs in the program.
- **Timer:** In coding, use a timer command to run a block of commands after a timed delay or at regular intervals.
- **Turtle Object**: A type of object in 2Code that moves by coding angles of rotation and distance to move.

Unit 3.2: Online Safety

- **Appropriate:** When using online services such as blogging or sharing information. It's important that users behave appropriately. Users should be truthful, respectful, kind, seek any permissions and report anything they feel uncomfortable with.
- **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.
- **Inappropriate:** Behaviour or content online that is upsetting, rude, unkind or makes someone feel unsafe or concerned.
- **Internet:** A global computer network providing a variety of information and communication facilities, consisting of interconnected networks and computers.
- **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.
- **Personal information:** This is information that is personal to someone. For example, their favourite food, their name and age.
- **Permission:** When someone shares or accesses content online, it's important that permission is given if it belongs to someone else or has information about them.
- **Reliable Source:** A source of information that provides thorough, well-reasoned details based on valid evidence.
- **Reputable source:** Reputable sources are known places or sites that have accurate information. For example, well known news sites or encyclopaedias.
- **Spoof:** An imitation of something that appears to look genuine.
- **Verify:** When seeking content online, it is important that a user verifies the information. They can do this by checking other sources and looking for signs that may indicate inaccuracy in the information.
- **Vlogs:** A personal website or social media account where a person regularly posts short videos.
- **Website:** A set of related web pages located under a single name.

Unit 3.3: Spreadsheets

- **Advanced Mode:** A mode of 2Calculate in which the cells have references and can include formulae.
- **Budget:** A set amount of money that someone has available to spend on something. For example, a £100 budget to pay for a party.
- **Cell address:** Every cell has an address. This can be found by reading the column letter then row number.
- **Data:** A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.
- **Data table:** An organised display of information laid out in rows and columns.
- **Equal to tool:** Shows if an answer to a calculation is correct or not.
- **Formula Bar:** An area of the spreadsheet into which formulae can be entered using the '=' sign to open the formula.
- **Formula Wizard:** Helps a user create formulas which perform calculations on selected cells. For example, adding, multiplying, average, total.
- **Graph:** A way to represent data as an image.
    - **Bar graph:** A chart that uses bars to show quantities or numbers, so they can be easily compared.
    - **Line graph**: A graph used to display information which can change over time. For example, temperature at different times of the day.
    - **Pie Chart: A circular chart divided into segments which each represent a portion of the total amount.**
- **Quiz tool:** This can be used after the equals sign or instead of a number in a calculation. If you input the correct answer it will disappear.
- **Random number tool:** Will generate a random 1-digit number when clicked.
- **Range:** A group of adjacent cells in a spreadsheet.
- **Spinner tool:** This changes a number by one each time up or down is clicked.
- **Timer tool:** Counts in seconds. If a number is placed to the right of it, it will increase it by 1 each second.

Unit 3.4: Touch Typing

- **Keys:** buttons that are pressed on a computer keyboard or typewriter.
- **Posture:** The position in which someone holds their body when standing or sitting.
- **Spacebar**: The bar at the bottom of the keyboard.
- **Typing:** The action or skill of writing something by means of a typewriter or in this case a computer.

Unit 3.5: Email

- **Address Book:** A place where all contact's email addresses can be found and saved.
- **Attachment:** A file, which could be a piece of work or a picture, that is sent with the email.
- **BCC – Blind Carbon Copy:** A way of privately sending a copy of your email to other people so they can see the information in it, without the recipient knowing.
- **CC – Carbon Copy:** A way of sending a copy of your email to other people so they can see the information in it.
- **Communication:** The process of giving, receiving and sharing information. Examples of types of communication methods include Email, text message, speaking and listening, sending letters.
- **Compose:** Another word for 'write'.
- **Email:** (Electronic Mail) An Internet service that allows people who have an email address to send and receive instant electronic letters.
- **Inbox:** The folder where new emails go into when they are received.
- **Link:** A line between two nodes which shows that the two pieces of information are connected.
- **Mind mapping:** A graphical way to present ideas and concepts which helps structure information and identify relationships between different pieces of an idea.
- **Node:** Each bit of information on a mind map.
- **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.
- **Personal Information:** Identifying information about yourself such as your name, address and telephone number.
- **Save to draft:** Feature which allows you to compose an email and save it to draft folder to review later before sending.
- **Trusted Contact:** A person who you know and trust, making an email from them safe to open.

Unit 3.6: Branching Databases

- **Binary Tree:** Another name for a branching database.
- **Branching Database:** Used to classify groups of objects. It is used to help identify the objects by answering questions with either 'yes' or 'no'.
- **Data:** A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.
- **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.
- **Debugging:** The process of identifying and removing errors from computer hardware or software.

Unit 3.7: Simulations

- **Advantages:** The good and beneficial things about a situation.
- **Analysis:** A detailed examination of something.
- **Decision:** The act or result of making a choice after careful thought.
- **Disadvantages:** The difficult and negative things about a situation.
- **Evaluation:** To judge the value, condition or effectiveness of something.
- **Modelling:** The act of representing something, often on a smaller scale.
- **Point-of-view:** The viewpoint or thoughts someone has or feels about a certain matter.
- **Realistic:** Representing things accurately and true to real life.
- **Simulation:** A program that models a real-life situation. They let you try things out that would be too difficult or dangerous to do in real life.
- **Solution:** A means of solving a problem.
- **Unrealistic:** Representing things inaccurately and unlike real life.

Unit 3.8: Graphing

- **Axis:** A fixed horizontal or vertical reference line for the measurement of coordinates or to plot data in a graph.
- **Chart:** A diagram that represents data. Charts include graphs and other diagrams such as pie charts or flowcharts.
- **Column:** Vertical (down the page) divisions of a piece of work.
- **Data:** A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.

- **Graph:** A diagram that represents data. There are specific layouts for graphs including bar graphs and line graphs.
- **Investigation:** A formal inquiry or systematic study.
- **Row:** Horizontal (across the page) divisions of a piece of work.
- **Sorting:** Organising data by a rule such as alphabetical or numerical.
- **Survey:** Asking people for their opinions and collecting the information.
- **Tally Chart:** A way of recording how often something happens by counting in fives.
- **Title:** A few words put at the beginning of a produced piece of work, that relates to the subject matter of the work as a description or hint to the theme.

Unit 3.9: Presenting with Microsoft PowerPoint / Google Slides

- **Animation:** The process of adding movement to still objects.
- **Audio:** Another word for sound.
- **Border Properties:** The style of the border around text or an object including the colour, thickness and dashes (version dependent options).
- **Duration:** How long something lasts for.
- **Editing:** To improve something so that it is ready for publication.
- **Fill colour:** The internal colour of an object such as a textbox (version dependent options).
- **Font formatting:** Changing the appearance of text on the screen.
- **Layer:** Describes which objects appear in the front (foreground) of a slide and which appear behind other objects. (Version dependent options).
- **Media:** Information in the form of words, sounds, numbers, images, or graphics in electronic, print or broadcast form.
- **Presentation:** A visual way of displaying information to an audience that is clear and engaging. It can contain text, images, animation and videos.
- **Presentation Design:** The overall look of a presentation including background, fonts, footers and colours.
- **Preview:** An opportunity to look at something before it goes live.
- **Review:** To look at something critically and consider how it could be improved.
- **Slide:** A single page of a presentation.
- **Slideshow**: A collection of pages arranged in sequence that contains text and images to present to an audience.
- **Sound effect:** A sound other than speech or music made artificially for use in a play, film, or presentation.

- **Textbox:** An object that can be inserted into a piece of work in a program that allows the user to input text.
- **Theme:** A ready-made template including colours and fonts that can be edited by the user.
- **Timing:** A particular point or period of time when something happens.
- **Transition:** How a slide moves from one to the next.
- **Video:** A recording of a moving image.
- **WordArt:** A way of changing the appearance of text often using decorative shapes.

Unit 3.10: micro:bit

- **Accelerometer:** A sensor that detects movement.
- **Animation:** The process of adding movement to still objects.
- **Data:** A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.
- **Gestures:** A type if input where the mico:bit is moved in different ways such as tilting, dropping, shaking.
- **Hardware:** A physical device like a computer or a micro:bit that is told what to do by computer programs (software).
- **Image:** A graphic representation of something on a computer screen.
- **Infinite loop:** A loop that runs forever.
- **Input:** Information going into the computer. Can include moving or clicking the mouse, using the keyboard, swiping and tilting the device.
- **LED:** Light emitting diode – the micro-bit display is made of 25 LEDs.
- **Output:** Data sent from a computer such as information shown on the LED display or sound.
- **Program:** A set of instructions written in code that performs a given task.
- **Repeat:** This command can be used to make a block of commands run a set number of times or forever.
- **Sequence:** This is when a computer program runs commands in order.
- **Software:** A set of programs used to perform a task, which is usually more complex than a single program.
- **Speaker:** Part of the micro:bit that produces the sound output.

Year 4

Unit 4.1: Coding

- **Action**: The way that objects change when programmed to do so. For example, move.
- **Alert**: This is a type of output. It shows a pop up of text on the screen.
- **Algorithm**: a precise, step-by-step set of instructions used to solve a problem or achieve an objective.
- **Background**: In 2Code the background is an image in the design that does not change.
- **Button**: A type of object that responds to being clicked on.
- **Code blocks**: A way to write code using blocks which each have an object or an action.
- **Command**: A single instruction in 2Code.
- **Co-ordinates:** Numbers which determine the position of a point, shape or object in a particular space.
- **Debug\ Debugging:** Fixing code that has errors so that the code will run the way it was designed to.
- **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.
- **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.
- **Execute**: This is the proper word for when you run the code. We say, 'the program (or code) executes.'
- **Flowchart**: A diagram that uses specifically shaped, labelled boxes and arrows to represent an algorithm as a diagram.
- **'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.
- **'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.
- **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.

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

- **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.
- **Prompt**: A question or request asked in coding to obtain information from the user in order to select which code to run.
- **Implement**: When a design is turned into a program using coding.
- **Predict**: Use your understanding of a situation to say what will happen in the future or will be a consequence of something.
- **Repeat:** This **command** can be used to make a **block of commands run** a set number of times or forever.
- **Repeat until:** In 2Code this command will repeat a block of commands until a condition is met.
- **Run:** Clicking the Play button to make the computer respond to the code.
- **Properties**: These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.
- **Selection**: Selection is a decision command. When selection is used, a program will choose which bit of code to run depending on a condition.
- **Sequence**: This is when a computer program runs commands in order.
- **Timer:** In coding, use a timer command to run a block of commands after a timed delay or at regular intervals.
- **Variable**: A named area in computer memory. A variable has a **name** and a **value**. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running.

Unit 4.2: Online Safety

- **AdFly:** An online advertising marketplace that allows publishers to monetize their website traffic by placing advertisements on their site.
- **Attachment:** A file, which could be a piece of work or a picture, that is sent with an email.
- **Citation:** Making reference to the original source of a piece of information quotation or image.
- **Collaborate:** To work jointly on an activity or project.
- **Collaborative database:** A collaborative database allows more than one person to access and input data on the database.
- **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.
- **Data analysis:** The process of interpreting and understanding data that has been collected and organised.

- **Digital footprint:** The information about a person that exists on the Internet as a result of their online activity.
- **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:** Taking someone else's work or ideas and passing them off as one's own.
- **Ransomware:** A type of malicious software designed to block access to a computer system until a sum of money is paid.
- **Report:** If content or contact online worries someone, they should report it to a trusted adult such as a teacher or parent.
- **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.
- **Software:** The programs and other operating information used by a computer.
- **Spam:** Messages sent over the Internet, typically to many users, for the purposes of advertising, phishing or spreading malware.

  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.
- **Watermark:** Watermarks are used mainly on images or videos to show who the content belongs to.

Unit 4.4: Writing for Different Audiences

- **Campaign:** An organised course of action to achieve a goal.
- **Format:** The way in which something is arranged or set out.
- **Font:** A set of type which shows words and numbers in a particular style and size.
- **Genre:** The style or category type of a piece of art, music or writing.
- **Opinion:** A view or judgment someone forms about something, not always based on fact.
- **Reporter:** A person who reports news or conducts interviews for the press or broadcasting media.
- **Viewpoint:** The way someone sees or thinks about something.

Unit 4.5: Logo

- **Debugging:** The process of identifying and removing errors from computer hardware or software.
- **Grid**: The template around which the 2Logo turtle moves.
- **Logo:** A text-based coding language used to control an on-screen turtle to create mathematical patterns.
- **Logo Commands (e.g. FD, BK, RT, LT)** : A list of commands inputted into 2Logo to move the turtle around the screen.
- **Multi Line Mode:** Type several lines of commands in the text area.
- **Pen Down:** Lowers the screen pen so the 2Logo turtle draws a line on the screen.
- **Pen Up:** Raises the screen pen so the 2Logo turtle doesn't draw on screen.
- **Prediction**: When you say what is going to happen when you run the instructions.
- **Procedure:** Pieces of Logo text with a procedure name that can be run by calling them by name. Saves time if you want to print to screen lots of the same shape.
- **Repeat:** A set of instructions that is run a specified number of times.
- **Run Speed**: The speed at which the 2Logo turtle moves around the screen.
- **SETPC:** Set pen colour to a given colour.
- **SETPS:** Set the thickness of the pen's line.

Unit 4.6: Animation

- **Animation:** The process of adding movement to still objects.
- **FPS (Frame Per Second):** The number of frames played per second.
- **Frame:** A single image in an animation.
- **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.
- **Pause:** To temporarily stop the animation.
- **Stop motion:** A technique whereby the camera is repeatedly stopped and started, for example to give animated figures the impression of movement.

Unit 4.7: Effective Searching

- **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 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.

Unit 4.8: Hardware Investigators

- **Components:** Parts inside the computer casing.
- **CPU:** The 'brains' of the computer, where all the calculations take place.
- **Graphics Card:** Also known as a video card and used for displaying images.
- **Hard Drive:** Where the computer stores all your documents, pictures, games and videos.
- **Hardware:** The physical parts of a computer or device.
- **Input:** How information enters the computer.
- **Motherboard:** Main printed circuit board of the computer.
- **Network Card:** Used to connect the computer to a network such as the Internet.
- **Output:** Where information leaves the system.
- **Peripherals:** Parts that are attached to the computer case.
- **RAM:** Allows programs to store information to help the computer run quickly.
- **Software**: The programs that run on the computer.

Unit 4.9: Making Music

- **BPM:** Beats per Minute. Changing the BPM changes the speed of the music.
- **Dynamics:** How loud or quiet a sound is.
- **Harmonious:** Notes which sound tuneful and pleasant together.
- **Melody:** A sequence of notes which make up a tune.
- **Pitch:** How high or low a sound is.
- **Pulse:** The steady beat of a piece of music.
- **Rhythm:** A pattern of long and short sounds and silences.
- **Tempo:** How slow or fast a piece of music is.
- **Texture:** The different sounds you can hear in a piece of music.
- **Synths:** Short for synthesizer. Electronic musical instrument sounds.

Unit 4.10: Artificial Intelligence

- **Artificial Intelligence:** Computer systems able to perform tasks normally requiring human intelligence, such as seeing things, speech recognition, decision-making, and translation between languages.
- **Algorithm:** A precise, step-by-step set of instructions used to solve a problem or achieve an objective.
- **Data:** A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.

Unit 4.11: Physical Devices: micro:bit

- **Accelerometer:** A sensor that detects movement.
- **Conditionals**: See '**selection**'.
- **Data:** A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.
- **Gestures:** A type of input where the micro:bit is moved in different ways such as tilting, dropping, shaking.
- **Infinite loop:** A loop that runs forever.
- **Light Sensor**: An input that senses the level of light in the real world.
- **Logic**: How computers make decisions based on whether things are true or false.
- **Selection**: Selection is a decision command. When selection is used, a program will choose which bit of code to run depending on a condition.
- **Sensor:** An input that senses things in the real world, such as movement, temperature, and light levels.
- **Simulation:** A program that models a real-life situation. They let you try things out that would be too difficult or dangerous to do in real life.
- **Variable**: A named area in computer memory. A variable has a **name** and a **value**. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running.

Year 5

Unit 5.1: Coding

- **Abstraction**: Abstraction is a way of de-cluttering and removing unnecessary details to get a program functioning.
- **Action**: The way that objects change when programmed to do so. For example, move.
- **Algorithm**: a precise, step-by-step set of instructions used to solve a problem or achieve an objective.
- **Command**: A single instruction in 2Code.
- **Concatenation**: The action of linking a mixture of strings, variable values and numbers together in a series.
- **Co-ordinates:** Numbers which determine the position of a point, shape or object in a particular space.
- **Debug\ Debugging:** Fixing code that has errors so that the code will run the way it was designed.
- **Decomposition**: A method of breaking down a task into manageable components. This makes coding easier as the components can then be coded separately and then brought back together in the program.
- **Efficient:** In coding, simplified code runs faster and uses less processing memory, it is said to be more efficient.
- **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**) or when objects interact (**collision**). In 2Code, the event commands are used to create blocks of code that are run when events happen.
- **Flowchart**: A diagram that uses specifically shaped, labelled boxes and arrows to represent an algorithm as a diagram.
- **Friction**: The resistance that one surface or object encounters when moving over another.
- **Function:** A block or sequence of code that you can access when you need it, so you don't have to rewrite the code repeatedly. Instead, you simply **call** the **function** each time you want it.
- **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.

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

- **Object**: Items in a program that can be given instructions to move or change in some way (action). In 2Code Gorilla, the **object types** are button number, input, text, shape turtle, character, object, vehicle, animal.
- **Output**: Information that comes out of the computer e.g., **sound**. **prompt**, **alert** or **print to screen**.
- **Physical System:** In this context, this is any object or situation that can be analysed and modelled. For example, modelling the function of a traffic light, modelling friction of cars moving down surfaces or modelling the functions of a home's security system.
- **Predict**: Use your understanding of a situation to say what will happen in the future or will be a consequence of something.
- **Print to Screen:** A type of output. It prints text to the screen.
- **Properties**: These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.
- **Random**: Lacking a definite plan, purpose, or pattern.
- **Repeat:** This command can be used to make a block of commands run a set number of times, until a condition is met or forever.
- **Selection** A conditional decision command. When selection is used, a program will choose which bit of code to run depending on a condition. In 2Code selection is accomplished using **'if'** or **'if/else' statements.**
- **Sequence**: This is when a computer program runs commands in order.
- **Simplify:** In coding this is used to describe modifying the code to complete the same process with less lines of code.
- **Simulation**: A model that represents a real or imaginary situation. Simulations can be used to explore options and to test predictions.
- **String:** Text or a combination of text characters and numbers: A sequence of characters, which could form words, phrases or even whole sentences.
- **Tabs**: In 2Code tabs are used to organise code.
- **Timer:** In coding, use a timer command to run a block of commands after a timed delay or at regular intervals.
- **Variable**: A named area in computer memory. A variable has a **name** and a **value**. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running. In 2Code, variables can be **strings**, **numbers** or **computer-generated** variables to control objects of a type.

Unit 5.2: Online Safety

- **Appropriate**: Suitable or proper in the circumstances.
- **Avatar:** Avatars are images that are meant to represent someone. Because they aren't photos of someone, they are considered a safer alternative than a profile picture online.
- **Bibliography:** A list of all the books and articles used in a piece of work.
- **Citation:** A quotation from or reference to a book, paper, or author, especially in an academic work.
- **Collaborate**: To work jointly on an activity or project.
- **Communication:** A way of exchanging information for example, email, blogs, speaking, writing.
- **Copyright:** When the rights to something belong to a specific person.
- **Creative commons licence:** Creative Commons (CC) is a non-profit organisation who provide free licences for creators to use. If an image has a CC licence, you may usually use the image for non-commercial purposes. You must still give credit to the original creator of the image. If you do not, you could be prosecuted by the creator of the image.
- **Critical thinking:** When online, it's important that users think critically about the content they see and anything they are being asked to do such as enter data.
- **Digital Footprint:** The information about a person that exists on the Internet as a result of their online activity.
- **Encrypt:** The translation of data into a secret code to achieve data security.
- **Identity theft**: When someone pretends to be another person online. It can be done for financial gain or to steal others' private information.
- **Image manipulation:** This is where an image has been altered often using software.
- **Malware**: Software that is specifically designed to disrupt, damage, or gain unauthorised access to a computer system.
- **Ownership**: Who has permission or can give permission to use or edit a resource or part of the resource.
- **PEGI ratings:** These show the age that digital content is suitable for and the type of content that it contains.
- **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 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.
- **Personal information:** Identifying information about yourself such as your name, address and telephone number.

- **Plagiarism**: Taking someone else's work or ideas and passing them off as one's own.
- **Reference:** A mention of a source of information in a book or article including online.
- **Reliability:** The degree to which the result or contents of something can be depended on to be accurate. e.g. when using a search engine.
- **Responsibility:** Everyone who uses online services and devices connected to the Internet should behave in a respectful and safe way. They need to be aware of their responsibility to keep themselves safe and also not cause any unintended harm to others. Everyone has a responsibility to report things that they feel are inappropriate, upsetting or make them feel uncomfortable.
- **Reliable Source:** A source of information that provides thorough, well-reasoned details based on valid evidence.
- **Screenshot:** Taking an image of a device screen. This can be done to preserve evidence of what was on the screen.
- **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.
- **Spoof:** An imitation of something that appears to look genuine.
- **Validity:** The quality of something being logically or factually sound.

Unit 5.3: Spreadsheets

- **Area*:** This is the term used to describe the amount of space taken up by a flat shape or surface. For example the size of a field. Simple shapes like rectangles can have area calculated by multiplying length x width.
- **Budget:** An amount of money allocated to something. For example, the amount of money the children have been given for ingredients to make cakes for a school cake sale.
- **Computational Model:** Creating or using a simulation (a model) of a real-life situation, on a computer.
- **Converting values*:** The process of changing a value measured in a particular unit to the equivalent value in a different unit. For example, converting between kilometres and metres.
    - **Imperial measures*:** A system of measurement. It uses units including inches (distance), miles (distance), pounds (mass), pints (volume). It has mostly been replaced by the metric system.
    - **Metric measures*:** A system of measurement that uses the metre, litre, and gram as base units of distance, volume and mass.
- **Count Tool:** Counts how many of a variable there are in a spreadsheet.

- **Data:** A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.
- **Dice Tool:** Simulates the roll of a die to a random number between 1 and 6 when you click on it.
- **Expenses:** A cost associated with a project. For example, the cost of buying ingredients for a cake sale, materials for making banners etc.
- **Formula:** A group of letters, numbers, or other symbols which represents a scientific or mathematical rule. The plural of formula is formulae.
- **Formula Bar**: An area of the spreadsheet into which formulae can be entered using the '=' sign to open the fomula.
- **Hypothesis**: a concept or idea that you test through research and experiments. The plural of hypothesis is hypotheses.
- **Perimeter*:** Is the term used to describe all the sides lengths added up. For example, to work out perimeter of a rectangle we can add up all its sides lengths.
- **Profit:** Money that is earned in trade or business after paying the costs of producing and selling goods and services. For example, the amount of money there is from a cake sale when the cost of creating them has been subtracted.
- **Variable:** A variable is used in computing to keep track of things that can change while a program is running.

***Predominantly mathematics terms rather than computing terms.**

Unit 5.4: Databases

- **Arrange:** Sorting information in order against a search request.
- **Avatar:** An icon or figure representing a person in a video game, Internet forum, etc.
- **Chart:** A diagram that represents data. Charts include graphs and other diagrams such as pie charts or flowcharts.
- **Collaborative:** Produced by, or involving, two or more parties working together**.**
- **Data**: A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.
- **Database:** A set of data that can be held in a computer in a format that can be searched and sorted for information.
- **Database Report:** A way of producing a written paragraph that incorporates the data from the fields and records of the database.
- **Field:** A heading in a database record against which information is entered.
- **Group:** Putting similar pieces of information together in a database so it is easy to read, understand and interpret.
- **Record:** A collection of data about one item entered into a database.

- **Search:** A way of finding information.
- **Sort**: Organising data by a rule such as alphabetical or numerical.
- **Statistics:** The study and manipulation of data, including ways to gather, review, analyse, and draw conclusions from data.

Unit 5.5: Game Creator

- **Evaluation:** To critically examine a program. It involves collecting and analysing information about a program's activities, characteristics, and outcomes
- **Feedback:** In this case, share information with the creator about how the game could be improved.
- **Image:** In this case, a picture displayed on the computer screen.
- **Instructions:** Detailed information about how something should be done or operated.
- **Promotion:** The publicising of a product, in this case a game, so as to increase sales or public awareness.
- **Quest:** To find or do something.
- **Scene:** The place where an incident in real life or fiction occurs or occurred.
- **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.
- **Theme:** In this case, the subject of the game.

Unit 5.6: 3D Modelling

- **2D**: Something that has only two dimensions; height and width.
- **3D**: Something that has three dimensions; height, width and depth.
- **3D Printing:** The action or process of making a physical object from a three-dimensional digital model, typically by laying down many thin layers of a material in succession.
- **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.
- **Design Brief:** A document for a design project, defining the core details, including the goal and strategy.
- **Net:** What a 3D shape would look like if it was unfolded and opened out flat.
- **Pattern Fill:** A tool where you can add a customised repeating pattern to the surface of the net.
- **Points:** The points on a 3D net which create the corners of the 3D shape.
- **Template:** Something that serves as a model for others to copy and edit.

Unit 5.7: Concept Maps

- **Concept:** An idea in the form of a question.
- **Concept Map:** A tool for organising and representing knowledge about a concept. They form a web of ideas which are all interconnected.
- **Connection**: Represents a relationship or link between two nodes or ideas.
- **Collaborate:** Participating in an activity with more than one person working together.
- **Heading:** A main title for a piece of written work.
- **Sub-Heading:** A title for a section of a piece of written work.
- **Node**: A box on screen which represents a concept or idea. Can contain text and\or an image.
- **Presentation Mode:** A mode on 2Connect where nodes and connections are revealed gradually to be accompanied by a verbal presentation.
- **Story Mode:** A way to use a 2Connect concept map to create a piece of text.

Unit 5.8: Word Processing with Microsoft Word / Google Docs

- **Attributing:** Saying where a piece of writing or photograph came from and giving the 'owner' credit.
- **Bulleted lists:** A list with bullet points, used when the items do not have an order.
- **Breaks:** A marker tool used to organise the flow of your pages by restarting text on the next page or starting a new section with a new format.
- **Caps Lock:** A button on the computer keyboard which changes the letters to upper case (capital letters).
- **Captions:** Text under an image to provide more information about what is shown.
- **Column (table): A collection of cells aligned vertically (downwards) in a table.**
- **Columns (newspaper):** They divide the page vertically into two or more boxes of text which are read downwards before moving across to the next.
- **Copy and Paste:** A way of transferring words or images from one location to another.
- **Copyright:** When an image, logo or idea has a legal right to not be copied or used without the owner's permission.
- **Creative Commons:** Images where the copyright holder, often the creator, has given permission for the image to be used as long as the creator is attributed.
- **Cropping:** Removing the unwanted outer areas from an image.
- **Cursor:** The flashing vertical line that shows your place in a document.
- **Distributing Columns:** A quick way to make all the columns on a table the same width.

- **Document:** A type of file which shows written information and/or images and sometimes charts and tables.
- **Drop Capitals:** A large capital letter used decoratively at the beginning of a section of text.
- **Editor Options:** The editing options that someone can take with a document when it has been shared with them. (Google Docs only)
- **Font:** A set of type which shows words and numbers in a particular style and size.

Front Screen: The screen which first opens on launch. It gives access to the different actions a user can take.

- **Grammar check:** A software tool used for spotting and correcting grammar mistakes.
- **Hyperlink:** A clickable link from a document to another location, often a webpage.
- **Image Editing:** The act of altering or changing an image to improve the effect.
- **Image Transparency:** Changing the transparency provides the ability to make an image 'see through'.
- **Merge Cells:** A tool you can use when making a table to join cells which are next to each other in columns or rows.
- **Numbered lists:** A list with numbers, used when the items are in a specific order.
- **Page Orientation:** The direction that the rectangular page is viewed. Portrait means longer side going upwards, Landscape means the longer side going sideways.
- **Readability**: How easy and pleasant it is to read and understand a document.
- **Row:** A collection of cells aligned horizontally (side to side) in a table.
- **Selecting/highlighting:** Clicking on the text you wish to edit.
- **Sharing:** The ability to share a document with someone else via a link over email.
- **Spell check:** A software tool used for spotting and correcting spelling mistakes.
- **Styles:** In-built combinations of formatting characteristics e.g. font style and size, which you can apply to any text in your document.
- **Template:** A ready-made outline of a document you might want to adapt, such as a letter or certificate.
- **Text Box:** A box which can be added to your document that lets you type text anywhere in your file.
- **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 program which allows you to write, edit and print different documents.

- **Zoom:** You can zoom in to get a close-up view of a document or zoom out to see more of the page.

Unit 5.9: Using External Devices – Purple Chip

Note: Many of these words have been introduced as part of the coding units.

- **Alert:** This is a type of output. It shows a pop up of text on the screen with an OK button to close the screen.
- **Algorithm**: a precise, step-by-step set of instructions used to solve a problem or achieve an objective.
- **Chip show text:** An output of 2Code Purple Chip that displays text horizontally scrolling across the Purple Chip screen.
- **Code View:** The view in 2Code that shows the coding blocks used to make the program.
- **Debug**: Fixing code that has errors so that the code will run the way it was designed.
- **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.
- **Design View:** The view in 2Code that shows what the program looks like to the user.
- **Emulator/ Simulator**: In computing this is a piece of software that causes the host device to behave like a different computer system (the guest).
- **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) or when objects interact (collision). In 2Code, the event commands are used to create blocks of code that are run when events happen.
- **External device**: A portable computerised device such as a micro-bit, Makey Makey, Crumble board, temperature, pressure or light sensor. Devices such as smart phones can also be used as external devices using their sensors and functions to replicate the functionality of simpler devices. These devices communicate with other devices.
- **Function:** A block or sequence of code that you can access when you need it, so you don't have to rewrite the code repeatedly. Instead, you simply call the function each time you want it.
- **Host**: The main device that the external devices connect to.
- **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.

- **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.
- **Output:** Information that comes out of the computer e.g., sound. prompt, alert or print to screen.
- **Print to Screen:** A type of output. It prints text to the screen.
- **QR code:** A machine-readable code consisting of an array of black and white squares, used for storing a URL or other information that can be read by a device's camera.
- **Sensor:** A device that produces an output signal for the purpose of sensing a physical phenomenon. The input can be light, heat, motion, moisture, pressure or a growing number of other environmental phenomena.
- **URL: The address of a webpage.**
- **Variable**: A named area in computer memory. A variable has a name and a value. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running. In 2Code, variables can be strings, numbers or computer-generated variables to control objects of a type.
- **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.

Unit 5.9: Using External Devices – micro:bit

Note: Many of these words have been introduced as part of the coding units.

- **Accelerometer:** A sensor that detects movement.
- **Ambient Temperature:** The temperature of the air around us.
- **Crocodile clip:** Wires used to connect external devices to the pins on a micro:bit.
- **Data**: A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.
- **Electrical circuit:** a loop through which an electrical current can flow.
- **Gestures:** A type of input where the micro:bit is moved in different ways such as tilting, dropping, shaking.
- **IF/THEN:** logic commands that help the computer make decisions or choices based on conditions.
- **Input:** Information going into a device. On a micro:bit, this includes button presses, sensor readings and messages via the micro:bit pins.
- **LED:** Light emitting diode - the micro:bit display is made of 25 LEDs.

- **Logic:** How computers make decisions based on whether things are true or false.
- **Output:** Information that comes out of the computer such as sound or lights shown on the LED display.
- **Pins**: Small connection areas on the micro:bit used to communicate with external devices.
- **Selection:** A conditional decision command. When selection is used, a program will choose which bit of code to run depending on a condition.
- Electrical circuit:
- **Sensor:** An input that senses things in the real world, such as movement, temperature, and light levels.
- **Simulation:** A model that represents a real or imaginary situation. Simulations can be used to explore options and to test predictions.
- **Thermometer**: An instrument for measuring and displaying temperature.
- **Thermostat:** A device that automatically controls the temperature within a space after a person sets it for the temperature they want. Thermostats may be found in places like houses, apartments, office buildings, cars, and refrigerators.
- **Variable**: A named area in computer memory. A variable has a name and a value. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running. This data can be accessed and updated while a program is running.

Year 6

Unit 6.1: Coding

- **Action**: The way that objects change when programmed to do so. For example, move.
- **Algorithm**: a precise, step-by-step set of instructions used to solve a problem or achieve an objective.
- **Command**: A single instruction in 2Code.
- **Concatenation**: The action of linking things together in a series.
- **Co-ordinates:** Numbers which determine the position of a point, shape or object in a particular space.
- **Debug\ Debugging:** Fixing code that has errors so that the code will run the way it was designed to.
- **Decomposition**: A method of breaking down a task into manageable components. This makes coding easier as the components can then be coded separately and then brought back together in the program.
- **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**) or when objects interact (**collision**). In 2Code, the event commands are used to create blocks of code that are run when events happen.
- **Execute\ Run:** Clicking the Play button to make the computer respond to the code. Execute is the technical word for when you run the code. We say, 'the program (or code) executes.'
- **Flowchart**: A diagram that uses specifically shaped, labelled boxes and arrows to represent an algorithm as a diagram.
- **Function:** A block or sequence of code that you can access when you need it, so you don't have to rewrite the code repeatedly. Instead, you simply **call** the **function** each time you want it.
- **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. In 2Code the commands **prompt for input** and **get input** are used to prompt the user to enter typed input and then use this input.
- **Launch Command:** This command will open another Purple Mash file or an external website that you specify when it is called.
- **Object**: Items in a program that can be given instructions to move or change in some way (action). In 2Code Gorilla, the **object types** are button number, input, text, shape turtle, character, object, vehicle, animal.

- **Output**: Information that comes out of the computer e.g. sound. prompt, alert or print to screen.
- **Predict**: Use your understanding of a situation to say what will happen in the future or will be a consequence of something.
- **Procedure:** An independent code module that fulfils a task and is referenced within a larger body of code. In 2Code a procedure might be coded as a function.
- **Properties**: These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.
- **Repeat:** This **command** can be used to make a **block of commands run** a set number of times or forever.
- **Repeat until:** In 2Code this command will repeat a block of commands until a condition is met.
- **Selection**: Selection is a decision command. When selection is used, a program will choose which bit of code to run depending on a condition. In 2Code selection is accomplished using **'if'** or **'if/else' statements.**
- **Sequence**: This is when a computer program runs commands in order.
- **Simulation**: A model that represents a real or imaginary situation. Simulations can be used to explore options and to test predictions.
- **String:** Text or a combination of text characters and numbers: A sequence of characters, which could form words, phrases or even whole sentences.
- **Tabs**: In 2Code tabs are used to organise code.
- Text Adventure: A computer game that uses text instead of graphics.
- **Text Object:** An object that can contain text and be formatted using the properties of colour and border. It is not a clickable object but can be programmed to hide.
- **Timer:** In coding, use a timer command to run a block of commands after a timed delay or at regular intervals.
- **Turtle Object:** A type of object in 2Code that moves by coding angles of rotation and distance to move.
- **Variable**: A named area in computer memory. A variable has a **name** and a **value**. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running.
- **x and y properties:** Properties of an object that denote its position on the screen. In 2Code the top left of the screen is (0,0) with maximum values of x and y determined by the grid size property of the background.

Unit 6.2: Online Safety

- **Data Analysis:** The process of interpreting and understanding data that has been collected and organised.
- **Digital Footprint:** The information about a person that exists on the Internet as a result of their online activity.
- **Inappropriate:** Something that is not suitable or proper in the situation.
- **Location sharing:** A way of sharing with others your device's location, these can be switched off for added security.
- **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.
- **PEGI rating:** A rating that shows what age a game is suitable for.
- **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.
- **Print Screen:** Capturing an image of the current screen on a device. Also known as a screen shot.
- **Screen Time:** The time spent using a device with a screen, such as a computer, television, tablet or phone.
- **Secure websites:** Secure website have particular privacy features to look out for such as a padlock or https.
- **Spoof:** An imitation of something that appears to look genuine.

Unit 6.4: Blogging

- **Approval:** The act of acknowledging something is appropriate**.**
- **Archive:** In this case, where older blog or vlog posts are stored.
- **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 post:** A piece of writing or other item of content published on a blog.
- **Collaborate:** Work jointly on an activity or project.
- **Commenting**: To express an opinion or reaction in speech or writing.
- **Connections**: A relationship in which a person or thing is linked or associated with something else.
- **Nodes:** a point in a diagram, in this case on 2Connect, at which lines or pathways intersect or branch.
- **Vlog:** A personal website or social media account where a person regularly posts short videos.

Unit 6.5: Text Adventures

- **Debug\ Debugging:** Fixing code that has errors so that the code will run the way it was designed to.
- **Flow of Control:** The order that the computer program executes the commands it contains.
- **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.
- **Link:** A way of connecting one page to another.
- **QR Code:** a code consisting of black and white squares, typically used for storing URLs or other information for reading by the camera on a smartphone.
- **Repeat**: To make something happen again.
- **Selection:** When selection is used, a program will choose a different outcome depending on a condition.
- **Sprite**: A computer graphic which may be moved on-screen.
- **Step Through:** A way of executing one line of code at a time to help programmers see what happens at each stage of a program. This can be helpful when debugging.
- **Text Adventure:** A computer game that uses text instead of graphics.
- **Variables**: A variable has a name and a value. The program can change this variable value.

Unit 6.6: Networks

- **Data:** A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.
- **DNS (Domain Name Server):** The system that automatically translates internet addresses to the numeric machine addresses that computers use.
- **Ethernet:** A system for connecting several computer systems to form a local area network.
- **Hosting:** Where a website or other piece of information is stored.
- **Hub\Switch:** The connection point for networks where data packets from many locations converge and are then sent out to different devices.
- **Internet:** A global computer network providing a variety of information and communication facilities consisting of interconnected networks using standardized communication protocols.
- **IP address:** A unique string of characters that identifies each computer using the Internet Protocol to communicate over a network.

- **ISP (Internet Service Provider):** A company that provides subscribers with access to the internet.
- **LAN (Local Area Network):** A computer network that links devices within a building or group of adjacent buildings, especially one with a radius of less than 1 km.
- **Network:** Several interconnected computers, machines, or operations.
- **Router:** A device which forwards data packets to the appropriate parts of a computer network.
- **Search engine:** A program that searches for and identifies items in a database that correspond to keywords or characters specified by the user, used especially for finding particular sites on the World Wide Web.
- **WAN (Wide Area Network):** A collection of local-area networks (LANs) or other networks that communicate with one another over a large physical area or even globally.
- **Web Page:** A document on the World Wide Web.
- **Web server:** Software and hardware that uses HTTP (Hypertext Transfer Protocol) and other protocols via the World Wide Web.
- **Website:** a set of related web pages located under a single domain name, typically produced by a single person or organization.
- **WLAN: (Wireless Local Area Network):** A collection of devices connected together wirelessly in one physical location
- **Wi-Fi**: A facility allowing computers, smartphones, or other devices to connect to the internet or communicate with one another wirelessly within a particular area.
- **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.

Unit 6.7: Quizzing

- **Audience:** People who watch a performance or use a resource.
- **Audio:** Sound (especially when recorded).
- **Case-Sensitive:** (of a computer program or function) differentiating between capital and lower-case letters.
- **Clipart:** Simple pictures to use on computers.
- **Clone**: To make a complete copy of something.
- **Cloze:** A test in which words are removed from a text and replaced with spaces. The learner has to fill each space with the correct word(s).
- **Copy\Paste:** A way to copy objects such as text or images using technology.
- **Database:** A collection of data organised in such a way that it can be searched, and information found easily.
- **Database Record:** Information about one item in the database.

- **Database Field:** The separate pieces of information collected for each record of the database.
- **Image:** Pictures (includes clipart, illustrations and photos).
- **Image Filter:** Function of a computer program that changes the appearance of uploaded images.
- **Selfie:** A photo taken by a person of themselves.
- **Statistics:** Statistics is the study and manipulation of data, including ways to gather, review, analyse, and draw conclusions from data.
- **Undo\Redo:** Using functions to undo the last action(s) performed and (optionally) redo it.
- **Preview**: To see what something (or part of something) looks like before committing to it being the final version.
- **Quiz:** An activity in which participants answer questions and receive a score dependent upon correct answers.

Unit 6.8: Binary

- **Binary:** A number system in which there are two separate integers that can be used to make all numbers. This is also called the base 2.
- **Bit:** A single 0 or 1 is called a bit. This word comes from '**B**inary Dig**it**'.
- **Decimal:** A fraction whose denominator is a power of ten and whose numerator is expressed by figures placed to the right of a decimal point.
- **Denary:** A number system in which there are ten separate integers that can be used to make all numbers. This is also called the **base 10** and **decimal system.**
- **Digit**: A single integer used to show a number.
- **Game States:** How states within computer programs and games are often represented in code using binary values of 1 (for on) and 0 (for off). This is usually done using a variable.
- **Integer:** Any whole number. This includes negative and positive numbers but not fractions or decimals.
- **Microprocessor:** Known as the **computer chip**. It contains many transistors to pass signals.
- **Nanotechnology**: The science of manipulating materials at their smallest level. At this level, the molecules of a material can be seen.
- **Nibble, Byte, Kilobyte, Megabyte, Gigabyte and Terabyte:** Words used to describe numbers of bits and the computer memory space that they use. (Nibble - 4 bits, Byte - 8 bits, Kilobyte (KB) - 1024 bytes, Megabyte (MB) - 1024 KB, Gigabyte (GB) - 1024 MB, Terabyte (TB) - 1024 GB).
- **Switch**: An act of changing to or adopting one thing in place of another.
- **Transistor:** A transistor is a tiny switch that is activated by the electronic signals it receives.

- **Variable**: A named area in computer memory. A variable has a **name** and a **value**. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running.

Unit 6.9: Spreadsheets with Microsoft Excel / Google Sheets

- **Auto fit**: A function of a spreadsheet that alters column widths to fit data.
- **Average**: A number expressing the typical value in a set of data. Also known as the mean. It is calculated by dividing the sum of the values in the set by their number.
- **Budget**: The amount of money available to spend on a project.
- **Calculation:** The process or result of adding, subtracting, multiplying, or dividing or a combination of these operations.
- **Categories Ribbon†:** The way that icons are organised into related functions in the Microsoft menu bar.
- **Cell:** An individual section of a spreadsheet grid. It contains data or calculations.
- **Cell Reference:** Each cell has a cell reference that shows its position. The cell reference is displayed in the box on the top left (not on tablet version).
- **Chart**: A diagram that represents data. Charts include graphs and other diagrams such as pie charts or flowcharts.
- **Column:** Vertical, lettered reference points for the cells in a spreadsheet.
- **Computational Model:** Creating or using a simulation (a model) of a real-life situation, on a computer.
- **Conditional formatting**: When a cell or cells are formatted in a specific way depending upon the values in the cell or cells.
- **Currency**: A system of money in general use in a particular country.
- **Data:** A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.
- **Delimiter***: A character that separates each piece of data.
- **Expense**: A cost associated with a project.
- **Filter**: Changing the view of the spreadsheet to see only certain data by selecting from the available data in the columns.
- **Flash-fill*:** A function of Excel that fills cells using a pattern started by the user.
- **Formatting**: The way that text looks (in a cell).
- **Formula:** A group of letters, numbers, or other symbols which represents a scientific or mathematical rule. The plural of formula is **formulae**.
- **Formula Bar:** An area of the spreadsheet into which formulae can be entered using the '=' sign to open the formula.

- **Graph**: A diagram that represents data there are specific layouts for graphs including bar graphs and line graphs.
- **Horizontal axis:** The x-axis of a graph is called the horizontal axis.
- **Maximum**: The largest amount or number.
- **Minimum**: The smallest amount or number.
- **Profit**: Money that is earned in trade or business after paying the costs of producing and selling goods and services.
- **Range:** A collection of selected cells: all the numbers you want to appear in a calculation. For example, A1:A12 includes all the cells from A1 to A12.
- **Row:** Horizontal, numbered reference points for the cells in a spreadsheet.
- **Series:** Data that follows a pattern.
- **Sheet:** The label used to describe each individual page in a spreadsheet workbook.
- **Sorting**: Organising data by a rule such as alphabetical or numerical.
- **Spreadsheet:** a software tool used for organising information and performing calculations on the data.
- **Template**: A document that has been pre-formatted for a purpose including formulae to be used.
- **Text Wrapping:** This displays the cells contents on multiple lines rather than one long line, allowing all the contents to be shown.
- **Vertical axis:** The y-axis of a graph is called the vertical axis.
- **Workbook:** A spreadsheet file that can contain 1 or more spreadsheets.

*Full version only
†Microsoft only

All Coding Vocabulary

Definitions might vary in some units when they are adapted for younger learners or include a subset of information that the children will have encountered at that point.

- **Abstraction**: Abstraction is a way of de-cluttering and removing unnecessary details to get a program functioning.
- **Action**: A type of command which causes an object to alter its behaviour. Actions could be used to move an object or change a property.
- **Alert**: This is a type of output. It shows a pop up of text on the screen.
- **Algorithm**: a precise, step-by-step set of instructions used to solve a problem or achieve an objective.
- **Background**: In 2Code the background is an image in the design that does not change.
- **Bug**: A problem in a computer program that stops it working the way it was designed.
- **Button**: A type of object that responds to being clicked on.
- **Challenge:** A task to be completed.
- **Click**: This describes the action of clicking a mouse pointer on the screen or tapping with a finger on a touch screen.
- **Click events:** An event that is triggered when the user clicks on an object.
- **Code**: Instructions that a programmer enters into a computer that cause the computer to perform a certain way.
- **Code blocks**: A way to write code using blocks which each have an object or an action. Each group of blocks will run when a specific condition is met or when an event occurs.
- **Coding**: writing instructions that the computer can process (understand) to make programs (software).
- **Code view:** The view in 2Code that shows the coding blocks used to make the program.
- **Collision detection:** In 2Code, this measures whether 2 objects have touched each other.
- **Collision detection action:** The action that is programmed to happen once the objects collide.
- **Collision detection event**: The event of two objects colliding.
- **Command:** A single instruction within a computer program.
- **Concatenation**: The action of linking a mixture of strings, variable values and numbers together in a series.
- **Co-ordinates:** Numbers which determine the position of a point, shape or object in a particular space.

- **Debug\ Debugging:** Fixing code that has errors so that the code will run the way it was designed.
- **Decomposition**: A method of breaking down a task into manageable components. This makes coding easier as the components can then be coded separately and then brought back together in the program.
- **Degrees**: A measurement of a turn. A full turn has 360 degrees; written as 360°.
- **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.
- **Direction:** The path that something travels. For example, a robot moving forwards, backwards or diagonal.
- **Design View**: The view in 2Code that shows what the program looks like to the user.
- **Efficient:** In coding, simplified code runs faster and uses less processing memory, it is said to be more efficient.
- **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.
- **Execute\ Run:** Clicking the Play button to make the computer respond to the code. Execute is the technical word for when you run the code. We say, 'the program (or code) executes.'
- **Flowchart**: A diagram that uses specifically shaped, labelled boxes and arrows to represent an algorithm as a diagram.
- **Friction**: The resistance that one surface or object encounters when moving over another.
- **Function:** A block or sequence of code that you can access when you need it, so you don't have to rewrite the code repeatedly. Instead, you simply **call** the **function** each time you want it.
- **Grid**: The template around which the 2Logo turtle moves.
- **'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.
- **'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.
- **Image**: A picture
- **Implement**: When a design is turned into a program using coding.
- **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.

- **Instructions**: detailed information about how something should be done or operated.
- **Interaction**: When objects perform actions in response to each other e.g. a frog turning into a monkey when it collides with a tree.
- **Interval**: In a timer, this is the length of time between the timer code running and the next time it runs e.g. every 1 second.
- **Launch Command:** This command will open another Purple Mash file or an external website that you specify when it is called.
- **Left and Right:** A position which relates to something. For example, make the fish move left of the screen.
- **Logo:** A text-based coding language used to control an on-screen turtle to create mathematical patterns.
- **Logo Commands (e.g. FD, BK, RT, LT)** : A list of commands inputted into 2Logo to move the turtle around the screen.
- **Nest**: When coding commands are put inside other commands. These commands only run when the outer command runs.
- **Object**: Items in a program that can be given instructions to move or change in some way (action).
- **Object Name**: Every object in a 2Code program must have a unique name that is used to program actions and events for the object.
- **Output**: Information that comes out of the computer e.g., **sound**. **prompt**, **alert** or **print to screen**.
- **Physical System:** In this context, this is any object or situation that can be analysed and modelled. For example, modelling the function of a traffic light, modelling friction of cars moving down surfaces or modelling the functions of a home's security system.
- **Plan:** When coding, a plan means including the objects and actions into a written document that shows what the program should look like (the design) and what the objects should do (the actions).
- **Predict**: Use your understanding of a situation to say what will happen in the future or will be a consequence of something.
- **Print to Screen:** A type of output. It prints text to the screen.
- **Procedure:** Pieces of Logo text with a procedure name that can be run by calling them by name. Saves time if you want to print to screen lots of the same shape.
- **Programmer**: A person who writes computer programs. Sometimes called a **coder**.
- **Prompt**: A question or request asked in coding to obtain information from the user in order to select which code to run.
- **Properties**: These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.
- **Random**: Lacking a definite plan, purpose, or pattern.

- **Repeat:** This **command** can be used to make a **block of commands run** a set number of times or forever.
- **Repeat until:** In 2Code this command will repeat a block of commands until a condition is met.
- **Right-Angle:** This is a term that describes an angle of 90°, as in a corner of a square, or formed by dividing a circle into quarters.
- **Route:** A path an object or thing takes to get somewhere.
- **Run**: Clicking the Play button to make the computer respond to the code.
- **Scale**: This is a property of an object that changes its size.
- **Scene**: In 2Code, this is the combination of the background and objects in a program.
- **Selection**: Selection is a decision command. When selection is used, a program will choose which bit of code to run depending on a condition.
- **Sequence**: This is when a computer program runs commands in order.
- **Simplify:** In coding this is used to describe modifying the code to complete the same process with less lines of code.
- **Simulation**: A model that represents a real or imaginary situation. Simulations can be used to explore options and to test predictions.
- **String:** Text or a combination of text characters and numbers: A sequence of characters, which could form words, phrases or even whole sentences.
- **Software**: The programs that run on a computer that are used by people to do things. For example, write, draw or play games.
- **Sound**: An output from the computer that makes a noise.
- **Tabs**: In 2Code tabs are used to organise code.
- **Test**: To run the code and observe what happens to identify where there might be bugs in the program.
- **Text**: Written words or numbers. In 2Code some objects such as buttons have a text property which is the writing on the button.
- **Text Object:** An object that can contain text and be formatted using the properties of colour and border. It is not a clickable object but can be programmed to hide.
- **Timer:** In coding, use a timer command to run a block of commands after a timed delay or at regular intervals.
- **Turtle Object**: A type of object in 2Code that moves by coding angles of rotation and distance to move.
- **Undo:** If we make a mistake, we can press the undo button.
- **Unit:** A unit such as make the turtle move 2 units (squares).
- **Variable**: A named area in computer memory. A variable has a **name** and a **value**. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running.
- **When Clicked:** An event command that is triggered when an object is clicked on.

- **When Clicked:** An event command that is triggered when an object is clicked on.
- **When Key Event:** An event triggered when a user presses a particular key on the keyboard.
- **When Swiped Event:** An event triggered when the user swipes a particular area of the screen e.g. the background (touch-screen devices only).
- **x and y properties:** Properties of an object that denote its position on the screen. In 2Code the top left of the screen is (0,0) with maximum values of x and y determined by the grid size property of the background.

All Spreadsheet Vocabulary

Definitions might vary in some units when they are adapted for younger learners or include a subset of information that the children will have encountered at that point.

- **Advanced Mode:** A mode of 2Calculate in which the cells have references and can include formulae.
- **Auto fit**: A function of a spreadsheet that alters column widths to fit data.
- **Budget:** The amount of money available to spend on a project.
- **Calculations:** The process or result of adding, subtracting, multiplying, or dividing or a combination of these operations.
- **Cell:** An individual section of a spreadsheet grid. It contains data or calculations.
- **Cell address\reference:** Every cell has an address. This can be found by reading the column letter then row number.
- **Chart:** A diagram that represents data. Charts include graphs and other diagrams such as pie charts or flowcharts.
- **Column:** Vertical, lettered reference points for the cells in a spreadsheet.
- **Computational Model:** Creating or using a simulation (a model) of a real-life situation, on a computer.
- **Conditional formatting**: When a cell or cells are formatted in a specific way depending upon the values in the cell or cells.
- **Count tool (How many? 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.
- **Data:** *(KS1)*A collection of information, used to help answer questions. *(KS2)* A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.
- **Delimiter***: A character that separates each piece of data.
- **Data table:** An organised display of information laid out in rows and columns.
- **Dice Tool:** Simulates the roll of a die to a random number between 1 and 6 when you click on it.
- **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.
- **Expense:** A cost associated with a project.
- **Filter**: Changing the view of the spreadsheet to see only certain data by selecting from the available data in the columns.
- **Flash-fill*:** A function of Excel that fills cells using a pattern started by the user.
- **Format Cell:** The way that data is displayed in a cell. For example, using units such as £ or $.
- **Formula:** A group of letters, numbers, or other symbols which represents a scientific or mathematical rule. The plural of formula is **formulae**.

- **Formula Bar:** An area of the spreadsheet into which formulae can be entered using the '=' sign to open the formula.
- **Formula Wizard:** The formula wizard helps a user create formulas which perform calculations on selected cells. For example, adding, multiplying, average, total.
- **Hypothesis:** A concept or idea that you test through research and experiments. The plural of hypothesis is hypotheses.
- **Image value:** Images placed in cells can have values given to them. E.g., apple 1, pear 2 etc.
- **Lock cell:** This feature lets a user lock a cell so its contents can't be deleted.
- **More than, less than & Equal tool:** This highlights either more than, less than or equals according to which numbers are either side of it.
- **Move cell:** The move tool in 2Calculate lets a user move the contents of a cell to a new cell.
- **Profit:** This is the amount of money that has been made after the costs of creating or doing something. For example, the amount of money there is from a cake sale when the cost of creating them has been subtracted.
- **Quiz tool:** This can be used after the equals sign or instead of a number in a calculation. If you input the correct answer it will disappear.
- **Random number tool:** This tool, when clicked, will generate a random number.
- **Range:** A collection of selected cells: all the numbers you want to appear in a calculation. For example, A1:A12 includes all the cells from A1 to A12.
- **Row:** Horizontal, numbered reference points for the cells in a spreadsheet.
- **Series:** Data that follows a pattern.
- **Sheet:** The label used to describe each individual page in a spreadsheet workbook.
- **Sorting**: Organising data by a rule such as alphabetical or numerical.
- **Speak tool:** This tool will speak the contents of a cell containing a number each time the value changes.
- **Spinner tool:** This changes a number by one each time up or down is clicked.
- **Spreadsheet:** A computer program that shows information in a grid of rows and columns.
- **Timer:** This tool counts in seconds. If a number is placed to the right of it, it will increase it by 1 each second.
- **Toolbox**: A place in 2Calculate where a user can add tools such as counting tools, change colours and include images.
- **Totalling tool:** The totalling tool adds up the value of every cell above it, next to it or diagonal to it according to which total tool is selected.
- **Value:** Images can have values given to them. For example, an apple could be given a value of 1 and a pear a value of 2.
- **Workbook:** A spreadsheet file that can contain 1 or more spreadsheets.

All Online Safety Vocabulary

Definitions might vary in some units when they are adapted for younger learners or include a subset of information that the children will have encountered at that point.

- **AdFly:** An online advertising marketplace that allows publishers to monetize their website traffic by placing advertisements on their site.
- **Alert:** A system that lets you know if you have something to look at.
- **Appropriate:** When using online services such as blogging or sharing information. It's important that users behave appropriately. Users should be truthful, respectful, kind, seek any permissions and report anything they feel uncomfortable with.
- **Attachment:** A file, which could be a piece of work or a picture, that is sent with an email.
- **Avatar:** A digital picture to represent someone.
- **Bibliography:** A list of all the books and articles used in a piece of work.
- **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.
- **Button:** An area where you click to make something happen.
- **Citation:** Making reference to the original source of a piece of information quotation or image.
- **Collaborate:** To work jointly on an activity or project.
- **Collaborative database:** A collaborative database allows more than one person to access and input data on the database.
- **Communication:** A way of exchanging information for example, email, blogs, speaking, writing.
- **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.
- **Creative commons licence:** Creative Commons (CC) is a non-profit organisation who provide free licences for creators to use. If an image has a CC licence, you may usually use the image for non-commercial purposes. You must still give credit to the original creator of the image. If you do not, you could be prosecuted by the creator of the image.
- **Critical thinking:** When online, it's important that users think critically about the content they see and anything they are being asked to do such as enter data.
- **Data analysis:** The process of interpreting and understanding data that has been collected and organised.
- **Device:** A piece of electrical equipment made for a purpose.
- **Digital footprint:** The information about a person that exists on the Internet as a result of their online activity.

- **Display Board:** In Purple Mash, this is a tool that enables you to share work with a wide audience.
- **Email:** Messages distributed by electronic means from one computer user to one or more people.
- **Encrypt:** The translation of data into a secret code to achieve data security.
- **File Name:** The name given to an online piece of work.
- **Filter:** A way of removing information you are not interested in.
- **Home Screen:** The home screen of a website is like the front page and contents page of a book.
- **Identifying:** It's important that any information shared online doesn't have details that can identify someone such as their name and address.
- **Identity theft**: When someone pretends to be another person online. It can be done for financial gain or to steal others' private information.
- **Image manipulation:** This is where an image has been altered often using software.
- **Inappropriate:** Behaviour or content online that is upsetting, rude, unkind or makes someone feel unsafe or concerned.
- **Internet:** (KS1) A way to send information from one computer to another anywhere in the world using technology such as phones, satellites and radio links. (KS2) A global computer network providing a variety of information and communication facilities, consisting of interconnected networks and computers.
- **Icon:** An image on a web page that you can click on to navigate to somewhere.
- **Location sharing:** A way of sharing with others your device's location, these can be switched off for added security.
- **Login:** Using a username and password to access a system.
- **Log out:** Leaving a computer system.
- **Malware:** Software that is specifically designed to disrupt, damage, or gain unauthorized access to a computer system.
- **Menu:** A button which gives the user different options.
- **My Work Area:** The place on Purple Mash where your work is stored. Only you and your teachers can access this.
- **Notification:** A message telling you about something.
- **Ownership**: Who has permission or can give permission to use or edit a resource or part of the resource.
- **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.
- **PEGI ratings:** These show the age that digital content is suitable for and the type of content that it contains.

- **Permission:** When someone shares or accesses content online, it's important that permission is given if it belongs to someone else or has information about them.
- **Personal information:** This is information that is personal to someone. For example, their favourite food, their name and age.
- **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:** Taking someone else's work or ideas and passing them off as one's own.
- **Print Screen:** Capturing an image of the current screen on a device. Also known as a screen shot.
- **Private information:** This is personal information that should be kept secure. For example, their date of birth, their full address, credit card numbers.
- **Protection:** Some places like schools, have systems in place that help to protect users from harmful content. However, it's important that anyone using online services should always behave carefully to help protect themselves and others.
- **Purple Mash Tools:** A selection of programs which help you carry out different tasks.
- **Ransomware:** A type of malicious software designed to block access to a computer system until a sum of money is paid.
- **Reference:** A mention of a source of information in a book or article including online.
- **Reliability:** The degree to which the result or contents of something can be depended on to be accurate. e.g. when using a search engine.
- **Reliable Source:** A source of information that provides thorough, well-reasoned details based on valid evidence.
- **Reply:** When someone receives an email, they can send a reply using the reply button.
- **Report:** If content or contact online worries someone, they should report it to a trusted adult such as a teacher or parent.
- **Reputable source:** Reputable sources are known places or sites that have accurate information. For example, well known news sites or encyclopaedias.
- **Responsibility:** Everyone who uses online services and devices connected to the Internet should behave in a respectful and safe way. They need to be aware of their responsibility to keep themselves safe and also not cause any unintended harm to others. Everyone has a responsibility to report things that they feel are inappropriate, upsetting or make them feel uncomfortable.
- **Saving:** Store your work as you create something so it can be accessed later.
- **Screenshot:** Taking an image of a device screen. This can be done to preserve evidence of what was on the screen.

- **Screen Time:** The time spent using a device with a screen, such as a computer, television, tablet or phone.
- **Search:** A way of finding specific resources you want to look at.
- **Secure:** Users online should take steps to help keep their personal and private information secure.
- **Secure websites:** Secure website have particular privacy features to look out for such as a padlock or https.
- **Shared Folder:** An area to save your work that everyone in the class can use.
- **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.
- **Spoof:** An imitation of something that appears to look genuine.
- **Software:** The programs and other operating information used by a computer.
- **Spam:** Messages sent over the Internet, typically to many users, for the purposes of advertising, phishing or spreading malware.
- **Spoof:** An imitation of something that appears to look genuine.
- **Validity:** The quality of something being logically or factually sound.

- **Verify:** When seeking content online, it is important that a user verifies the information. They can do this by checking other sources and looking for signs that may indicate inaccuracy in the information.
- **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.
- **Vlogs:** A personal website or social media account where a person regularly posts short videos.
- **Watermark:** Watermarks are used mainly on images or videos to show who the content belongs to.
- **Website:** A set of related web pages located under a single name.