Unit 5.1: Coding

- **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.
- **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

- **Advance Mode:** A mode in 2Calculate in which the cells have references and can include **formulae.**
- **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.
- **Columns**: Boxes running vertically in a spreadsheet.
- **Computational Model:** Creating or using a simulation (a model) of a real-life situation, on a computer.
- **Data:** A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.
- **Format Cell:** The way that text looks. Formatting cells is helpful for interpreting a cell's contents for example you might want to format a cell to show a fraction e.g. 4 ½ or include 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 fomula.
- **Formula Wizard:** The wizard guides the user in creating a variety of **formulae** for a cell such as calculations, totals, averages, minimum and maximum for the selected cells.
- **'How Many?' Tool:** This tool counts how many of a variable there are in a spreadsheet.
- **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:** 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.
- **Rows**: Boxes running horizontally in a spreadsheet.

- **Spreadsheet**: A computer program that represents data in cells in a grid of rows and columns. Any cell in the grid may contain either data or a formula that describes the value to be inserted based on the values in other cells.
- **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.
- **Variable:** A variable is used in computing to keep track of things that can change while a program is running.

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.