

Computing Medium Term Plan

EYFS

Computing is not assessed as part of the Development Matters Framework. Although there is not an outcome, the children are exposed to Computing throughout the Early Years beginning with understanding the function of a switch for example the use of a torch or camera. This progresses further by the children exploring how a Bee bot can move and understanding how to code the Bee bot on a journey. (Computer Science.) The children are exposed to technology through the use of the interactive whiteboards and age-appropriate programmes when using the iPads, such as making marks and changing colours, progressing to creating an illustration. (Digital Literacy) The children are taught the importance of e-safety, understanding basic warning signs and to always seek an adult when they are unsure. (Safe Use)

Year 1

Digital Literacy	Data	Computer Science	Multimedia	Safe Use (Ongoing Throughout Every Unit)
<p>Key Concept – Information and Presentation</p> <p>Curricular Goal To use the JIT programme to add pictures and text on a page.</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to insert clipart To be able to find and insert images from the internet (JIT) To be able to re-size images To be able to change font, colour and size To be able to use the shift key for capital letters and space bar for spaces between words To be able to log on, save and load work <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>Digital literacy pieces are designed to engage a reader for a purpose.</u> <u>Saving digital work means the work is not lost.</u></p> <p>Disciplinary Knowledge: <i>(Being a digital author)</i> <u>Use the shift key, space bar and back space.</u> <u>Log on, open, save work and publish.</u> <u>Access work from shared files.</u> <u>Create and resize pictures using paint tools, internet images and clip art.</u> <u>Manipulate text colour, size and font.</u></p> <p>Key Vocabulary: Log on, log off, save, shift key, open, space bar, back space, clip art.</p>	<p>Key Concept – Data Handling</p> <p>Curricular Goal Use the JIT programme to display information using pictographs.</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to display information in a variety of ways using JIT To be able to understand how computers can measure changes in temperature. To be able to create pictograms to present data. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>Data is information that has been translated into a form that is efficient for movement or processing.</u> <u>Understand that computers can measure data, including weather.</u></p> <p>Disciplinary Knowledge: <i>(Being a data analyst)</i> <u>Log on and access JIT on J2e.</u> <u>Display data on a JIT programme</u> <u>Make pictograms to present data.</u></p> <p>Key Vocabulary: Graph</p>	<p>Key Concept – Algorithms</p> <p>Curricular Goal Create a series of instructions and plan a journey for an on screen turtle/sprite.</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able create a series of instructions for an on-screen turtle/sprite. To be able to plan a journey for an on-screen turtle/sprite. To be able to debug a journey to reach a goal. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>Know how to code a journey following an icon.</u></p> <p>Disciplinary Knowledge: <i>(Being a gaming designer)</i> <u>Log on to J2e</u> <u>Plan a journey</u> <u>Programme a sprite</u> <u>Programme a sprite to go on the journey</u> <u>Debug potential errors for sprite on journey</u></p> <p>Key Vocabulary: Algorithm, bug, debug.</p>	<p>Key Concept – Story Telling</p> <p>Curricular Goal Make a short animation using a piece of clip art</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to use software to make a short animation. To be able to animate using clip art. To be able to use technology to take pictures of videos. To be able to use technology to record. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>Understand how technology allows people to take pictures or videos.</u></p> <p>Disciplinary Knowledge: <i>(Being an animator)</i> <u>Know how to animate using 1 piece of clip art.</u> <u>To use technology to take pictures or videos.</u> <u>To use technology to record their own voice.</u></p> <p>Key Vocabulary: Animate, Technology</p>	<p>Key Concept – Privacy</p> <p>Curricular Goal: To understand the term E-Safety and how to keep personal information private</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to understand the importance of using technology safely. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>Understand the importance of using technology safely.</u></p> <p>Disciplinary Knowledge: <i>(Being a technician)</i> <u>Know what the term 'E-Safety' means.</u> <u>Keep personal information private</u></p> <p>Key Vocabulary: Private, personal information, safe, internet</p>

Year 2

Digital Literacy	Data	Computer Science	Multimedia	Safe Use (Ongoing Throughout Every Unit)
<p>Links to prior learning: Recap how to add pictures and text on a page (JIT)</p> <p>Key Concept – Information and Presentation</p> <p>Curricular Goal: Create an e-book using the JIT programme that incorporates presentation styles.</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to add pages to a JIT5 document. To be able to choose from the different modules. To be able to mix the different modules on a page. To be able to add and delete pages. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>Understand what an e-book is and the purpose of one.</u> <u>Relay the positive and negative aspects of an e-book.</u></p> <p>Disciplinary Knowledge: <i>(Being a digital author)</i> <u>Log on and sign in to J2e</u> <u>Opening a J2 file</u> <u>Use the return/enter key to start a new line</u> <u>Make decisions about on-screen layout</u> <u>Save files accurately</u> <u>Search the internet for appropriate images</u></p> <p>Key Vocabulary: Return/enter key, E-Book, font, rotate, resize, edit.</p>	<p>Links to prior learning: To explain how to use JIT programme to display information using pictographs.</p> <p>Key Concept – Data Handling</p> <p>Curricular Goal: Use the JIT programme to input data in a bar chart or pie chart</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to create a variety of graphs using specific software. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>Understand how certain equipment can track and store data about temperature.</u></p> <p>Disciplinary Knowledge: <i>(Being a data analyst)</i> <u>Select the chart module in JIT5</u> <u>Add data to a pre-prepared template and plot a graph.</u> <u>Use a blank template add labels, data and plot a graph.</u></p> <p>Key Vocabulary: Bar chart, data</p>	<p>Links to prior learning: To explain a series of instructions (coding).</p> <p>Key Concept – Algorithms</p> <p>Curricular Goal: Write an algorithm to accomplish a specific task using block-based software on J2E level 1</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to use specific software to write an algorithm. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>Understand how to create/write an algorithm.</u></p> <p>Disciplinary Knowledge: <i>(Being a gaming designer)</i> <u>Select the move and turn blocks in J2Code</u> <u>Assemble these blocks to make a sprite complete a journey.</u> <u>Change the default units of Forward 100 and right 90</u> <u>Use the pen blocks to leave a trail of that journey.</u> <u>Spot errors in an algorithm and debug it to make it work.</u></p> <p>Key Vocabulary: Algorithms, code, sprite, predicting.</p>	<p>Links to prior learning: To explain what an animation is.</p> <p>Key Concept – Story Telling</p> <p>Curricular Goal: Make an animation using two pieces of clip art and speech bubbles to enhance on screen work using the JIT programme.</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to create an animated story using clip art. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>Create an animation using programmes.</u></p> <p>Disciplinary Knowledge: <i>(Being an animator)</i> <u>Select an appropriate background for an animation.</u> <u>Select appropriate clipart for an animation</u> <u>Move sprites a small distance for a realistic effect.</u> <u>Add speech bubbles appropriately.</u></p> <p>Key Vocabulary: Animate, frames.</p>	<p>Links to prior learning: Explain the term E-Safety.</p> <p>Key Concept – Support</p> <p>Curricular Goal: To know how to identify dangers and where to find help when using technology</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to identify the dangers of using technology. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>The importance of using technology safely.</u></p> <p>Disciplinary Knowledge: <i>(Being a technician)</i> <u>Identify what personal information is</u> <u>Why it is important to keep personal information private.</u> <u>Understand where to go for help if concerned when using technology.</u></p> <p>Key Vocabulary: Technology, PPEGI, Rating.</p>

Year 3

Digital Literacy	Data	Computer Science	Multimedia	Safe Use (Ongoing Throughout Every Unit)
<p>Links to prior learning: Explain what an e-book is.</p> <p>Key Concept – Information and Presentation</p> <p>Curricular Goal: Publish a non-narrative piece of writing with an audio commentary using the J2E programme.</p> <p>Learning objective:</p> <ul style="list-style-type: none"> To be able to use a variety of tools to edit, and publish a non-narrative piece of writing. <p>Substantive Knowledge: (Sticky Knowledge) (To know and remember) Be able to complete the process of choosing then altering text if writing electronically.</p> <p>Disciplinary Knowledge: (Being a digital author) Know how to type special characters using shift – () + “ etc. Know how to spellcheck a piece of text. Know how to take a screen shot. Insert pictures, resize, crop and reshape them to enhance their work.</p> <p>Key Vocabulary: Dash, sign +, speech marks “”, pound sign, spell check, screen shot, crop, audio, document.</p>	<p>Links to prior learning: Explain how to use a JIT programme to input data in a bar chart or pie chart</p> <p>Key Concept – Data Handling / Data Logging</p> <p>Curricular Goal: To record information about light, temperature or sound and producing a graph.</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to use a variety of data to create a branching database. <p>Substantive Knowledge: (Sticky Knowledge) (To know and remember) Understand how branches help classify areas and can be used for multiple purposes.</p> <p>Disciplinary Knowledge: (Being a data analyst) Connect data loggers to apps. Know how to interpret graphs from data loggers. Draw a graph. Use a premade database to answer a question. Use microscopes to capture and save magnified images. Use a pre-prepared database to draw charts Use a pre-prepared database to search for information using a single field search. To classify objects using a branching database.</p> <p>Key Vocabulary: Data loggers, database, classify.</p>	<p>Links to prior learning: Explain what an algorithm is.</p> <p>Key Concept – Algorithms</p> <p>Curricular Goal: Use coding to create a simple game using J2E level 2</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to code a game incurring commands. <p>Substantive Knowledge: (Sticky Knowledge) (To know and remember) Understand how to use different aspects of coding.</p> <p>Disciplinary Knowledge: (Being a gaming designer) Use keys to control a sprite Use if/then to code an event when 2 sprites collide. Code on-screen instructions for the user.</p> <p>Key Vocabulary: If/then, command, sequence, repeat, loop.</p>	<p>Links to prior learning: Explain what an animation is.</p> <p>Key Concept – Story Telling</p> <p>Curricular Goal: To be able to create an animation using a webcam</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to create an animation using a variety of tools. <p>Substantive Knowledge: (Sticky Knowledge) (To know and remember) Effectively use an art programme to explore brush sizes, fills and other effects.</p> <p>Disciplinary Knowledge: (Being an animator) Programme a sprite, focusing on different directions. Programme a sprite to visit a different location in order. Add message to sprite.</p> <p>Key Vocabulary: Webcam, filters.</p>	<p>Links to prior learning: Explain what Esafety is and the purpose of it.</p> <p>Key Concept – Personal Safety</p> <p>Curricular Goal: To make a presentation to explain how to game on line safely.</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to identify and explain how to game online safely. <p>Substantive Knowledge: (Sticky Knowledge) (To know and remember) Use technology safely. Disciplinary Knowledge: (Being a technician) Explain to others why it is important to keep personal information private. State where to go for help if concerned when using technology (who to speak to). Express the dangers when working using technology and how to identify them.</p> <p>Key Vocabulary: Online danger, online gaming, digital footprint, appropriate.</p>

Year 4

Digital Literacy	Data	Computer Science	Multimedia	Safe Use (Ongoing Throughout Every Unit)
<p>Links to prior learning: Explain everything you know about how to edit a JIT programme.</p> <p>Key Concept – Information and Presentation</p> <p>Curricular Goal: Make an online presentation on J2E using appropriate and carefully selected complimentary music.</p> <p>Learning objective:</p> <ul style="list-style-type: none"> To be able to use a series of functions to create an online poster. To be able to know how to type special characters using shift () (+). To know how to spellcheck a piece of text. To be able to know how to take a screen shot. To be able to insert pictures, resize, crop and reshape them to enhance text. To be able to select appropriate music. To be able to embed music to a presentation. <p>Substantive Knowledge: (Sticky Knowledge) (To know and remember) Select a section of text to change the appearance of the font for a purpose – colour, size, design. Published a non-narrative pieces of writing can include audio commentary.</p> <p>Disciplinary Knowledge: (Being a digital author) Using the shift key, type special characters. Proof read work and check corrections using spell check. Use the Shift + Ctrl + Show windows keys to take a screenshot. Use J2Office to insert pictures. Select and embed music to presentation. Using J2Office use the appropriate shortcuts to resize, crop and reshape text.</p> <p>Key Vocabulary: Spell-check, shift, screen shot, embed</p>	<p>Links to prior learning: Explain what the purpose of a data logger is.</p> <p>Key Concept – Data Handling / Data Logging</p> <p>Curricular Goal: Use different software to construct a graph. Use a data logger to record more than one of light, temperature or sound and produce a graph and interpret the results.</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to analyse data from a data logger. To be able to interpret the results on a graph. To be able to use a spreadsheet to draw a graph. To be able to use simple formulae to calculate totals in a spreadsheet. To be able to use pre-made databases to search for information with multiple criteria. <p>Substantive Knowledge: (Sticky Knowledge) (To know and remember) Be able to use data loggers and the importance of them in the wider world.</p> <p>Disciplinary Knowledge: (Being a data analyst) Using J2Data draw a graph accurately. Using J2Office follow a simple formulae to calculate totals. Incorporate Use pre-made databases to search for information with multiple criteria.</p> <p>Key Vocabulary: Sensor, spreadsheet, formula, search, criteria, pre-made database, filtering.</p>	<p>Links to prior learning: Explain possible obstacles in a game.</p> <p>Key Concept – Algorithms</p> <p>Curricular Goal: Create a game to achieve more than one goal on J2E – Level 2</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to use the crumble controller to code software. <p>Substantive Knowledge: (Sticky Knowledge) (To know and remember) Begin to use Crumble Controller to code software to mimic a real-life situation. (E.g. an alarm, police car lights.)</p> <p>Disciplinary Knowledge: (Being a gaming designer) Understand the component of circuits and crumble controller. Construct a circuit using the crumble. Incorporate a light source (sparkle) to the crumble. Code in a buzzer to the crumble. Add a switch to crumble controller. Use crumble to combine to create an on-screen obstacle.</p> <p>Key Vocabulary: Variable.</p>	<p>Links to prior learning: Explain the purpose of a webcam to create an animation.</p> <p>Key Concept – Story Telling and Virtual Locations</p> <p>Curricular Goal: Explore using green screen technology and create an animation with multiple characters for a purpose.</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to create an animation. To be able to successfully use the green screen. <p>Substantive Knowledge: (Sticky Knowledge) (To know and remember) How to use an art programme to explore brush sizes, fills and other effects.</p> <p>Disciplinary Knowledge: (Being an animator) Using the cut and paste tool, create a background (weather themed). Using the paint tool. Inserted in to the green screen technology on iPads. Recorded videos as weather forecaster.</p> <p>Key Vocabulary: Green screen, programme, animation.</p>	<p>Links to prior learning: Explain steps to keep safe when gaming online.</p> <p>Key Concept – Personal Safety</p> <p>Curricular Goal: Create a set of E-Safety rules that can be followed at home and at school and explain why these are important.</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to explain the importance of E-Safety. <p>Substantive Knowledge: (Sticky Knowledge) (To know and remember) Recognise acceptable and unacceptable behaviour when using technology. Understand how they should act when using technology and what apps are suitable for different age groups.</p> <p>Disciplinary Knowledge: (Being a technician) Understand that not everything on the internet is true or safe. Understand the potential threat when gaming online with a live chat function. Create a set of E-Safety rules for the class to follow at school and at home.</p> <p>Key Vocabulary: Live chat, acceptable, unacceptable, reliability, potential threat, filtering.</p>

Year 5

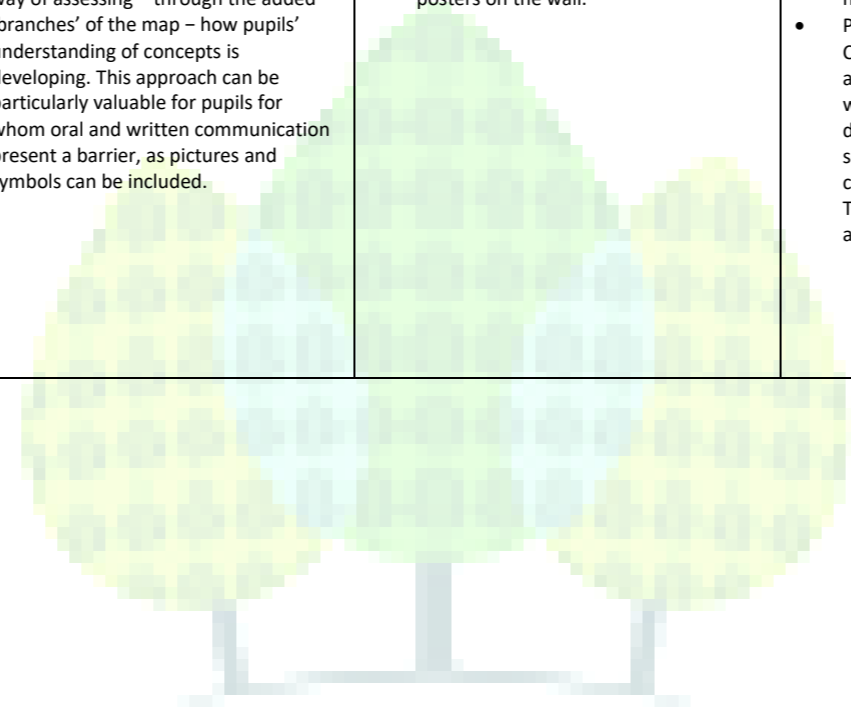
Digital Literacy	Data	Computer Science	Multimedia	Safe Use (Ongoing Throughout Every Unit)
<p>Links to prior learning: What shortcuts can you use on the keyboard?</p> <p>Key Concept – Information and Presentation</p> <p>Curricular Goal: Create and maintain a personal blog.</p> <p>Learning objective:</p>	<p>Links to prior learning: Write three ways you can interpret information from a data logger.</p> <p>Key Concept – Data Handling / Data Logging</p> <p>Curricular Goal:</p>	<p>Links to prior learning: Explain the steps needed to set up the crumble.</p> <p>Key Concept – Algorithms</p> <p>Curricular Goal:</p>	<p>Links to prior learning: Explain the purpose of green screen technology.</p> <p>Key Concept – Virtual Locations</p> <p>Curricular Goal: To be able to use green screen technology to produce a video presentation</p>	<p>Links to prior learning: Explain the rules to follow when online.</p> <p>Key Concept – Personal Responsibility</p> <p>Curricular Goal: To be able to write a code of conduct for working online</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to explain how to stay safe online.

<ul style="list-style-type: none"> To be able to understand the purpose of a blog. To be able to create a personal blog. To be able to maintain a personal blog. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>Understand which program to use.</u> <u>Know the process to create a personal blog.</u> <u>Create hyperlinks and QR codes.</u></p> <p>Disciplinary Knowledge: <i>(Being a digital author)</i> <u>Log on and establish a blog.</u> <u>Manage and maintain their own blog.</u> <u>Embed video clips into J2e to add to their blog.</u> <u>Create and add posts to their blog.</u> <u>Add a new category to their blog.</u> <u>Add a new category to their blog.</u> <u>Add and manage comments.</u> <u>Embed a video correctly.</u></p> <p>Key Vocabulary: Template, control key, select, copy, cut, paste, header, footer, embed, hyperlinks, QR code.</p>	<p>Use data loggers to formulate and test a hypothesis. Critique the benefits of using a given spreadsheet to aid financial management.</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to use data loggers to formulate and test a hypothesis. To be able to adapt a premade spreadsheet to investigate a financial task. To be able to contribute information to a collaborative database. To be able to debug errors in databases. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>To understand the importance of data loggers in the wider world.</u> <u>To identify when data loggers may be used.</u></p> <p>Disciplinary Knowledge: <i>(Being a data analyst)</i> <u>Connect data logger to a computer.</u> <u>Measure a variety of data (light, temperature, sound).</u> <u>Collect the data found in a table.</u> <u>Graph the data found using appropriate software.</u> <u>Interpret the data to test the hypothesis.</u></p> <p>Key Vocabulary: Formulae, collaborative, database.</p>	<p>Code to create a game where actions incur penalties on J2E – Level 3.</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to create a game. To be able to create a game where actions incur penalties. To be able to code the crumble controller to enhance a product. To be able to code the crumble to respond to an input device. E.g. A switch. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>Create a coded game.</u> <u>Understand where coding can be applied in the wider world.</u></p> <p>Disciplinary Knowledge: <i>(Being a gaming designer)</i> <u>Understand every component of the Crumble Controller.</u> <u>Assemble the Crumble Controller correctly.</u> <u>Use the crumble to enhance the quality of a product.</u> <u>Code the Crumble Controller to respond to an input device (E.g. A switch.)</u></p> <p>Key Vocabulary: Input, output.</p>	<p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to produce an interactive video presentation. To be able to create or select appropriate video clips. To be able to choose suitable backgrounds when using the green screen technology. To be able to create a video presentation using the green screen technology. To be able to review and evaluate videos or animations. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>Green screen technology can enable video presentations to become more engaging.</u> <u>How green screen technology is used in all aspects of media.</u></p> <p>Disciplinary Knowledge: <i>(Being an animator)</i> <u>Using the appropriate programme create/select video clips.</u> <u>Understand how to use the green screen technology.</u> <u>Using the green screen, use a relevant background (video or picture)</u></p> <p>Create a video presentation using the green screen.</p> <p>Key Vocabulary: Transitions, green screen.</p>	<ul style="list-style-type: none"> To be able to know how to manage content safely. To be able to know how and when to comment on a blog. To be discerning about information taken from the internet. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>Understand the importance of E-Safety and how to stay safe online.</u> <u>Understand what data should and shouldn't be shared online.</u></p> <p>Disciplinary Knowledge: <i>(Being a technician)</i> <u>Know how to comment on a blog.</u> <u>Know when it is appropriate to comment on a blog.</u> <u>Understand the potential dangers when taking information taken from the internet.</u> <u>Write a code of conduct for KS1 to explain the rules of E-Safety.</u></p> <p>Key Vocabulary: Blog, comment, responsibility.</p>
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Year 6

Digital Literacy	Data	Computer Science	Multimedia	Safe Use (Ongoing Throughout Every Unit)
<p>Links to prior learning: What is a blog?</p> <p>Key Concept – Information and Presentation</p> <p>Curricular Goal: Create a presentation for a purpose incorporating visual, sound and text elements that includes appropriate software using J2Office.</p> <p>Learning objective:</p> <ul style="list-style-type: none"> To be able to understand and use a keyboard effectively. To be able to create a multi-page presentation. To be able to incorporate visual, sound and text elements to a multi-page presentation. To be able to create an interactive presentation using appropriate software. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>Understand how to choose appropriate software for a given purpose and audience and make discerning choices about word processing to impact the outcome.</u></p> <p>Disciplinary Knowledge: <i>(Being a digital author)</i> <u>Understand the different aspects of a keyboard.</u> <u>Use a keyboard effectively</u> <u>Create a presentation using J2Office.</u> <u>Incorporate elements to presentation. (Visual, sound and text).</u></p> <p>Key Vocabulary: Word processing, menus, presentation.</p>	<p>Links to prior learning: Explain the purpose of a database.</p> <p>Key Concept – Data Handling / Data Logging</p> <p>Curricular Goal: Make decisions about when to use data loggers to investigate scientifically. Create and design a spreadsheet with a specific purpose in mind.</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to choose a theme and the choice of software to create a multi-page presentation. To be able to create a multi-page presentation. To be able investigate and evaluate where data bases are used in the wider world and understand their structure. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>Choose appropriate software for a given purpose and audience.</u> <u>Create a multi-page presentation incorporating visual, sound and text elements.</u></p> <p>Disciplinary Knowledge: <i>(Being a data analyst)</i> <u>Use a keyboard efficiently.</u> <u>Select the appropriate software for multi-page presentation.</u> <u>Justify the choice of using that particular software.</u> <u>Make discerning choices about word processing to impact the outcome.</u></p> <p>Key Vocabulary: Investigate, fields.</p>	<p>Links to prior learning: Explain the purpose of a switch in a crumble kit.</p> <p>Key Concept – Algorithms</p> <p>Curricular Goal: Construct a game to include a timer or a score using J2E – Level 3</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to code a game where actions incur penalties. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>How to code to create a game where actions incur penalties.</u> <u>Understand how coding can be used in the wider world.</u></p> <p>Disciplinary Knowledge: <i>(Being a gaming designer)</i> <u>Understand how to use a crumble controller.</u> <u>Enhance the quality of a product.</u> <u>Code the Crumble Controller to respond to an input device.</u></p> <p>Key Vocabulary: Timer, score.</p>	<p>Links to prior learning: Explain where a green screen is used.</p> <p>Key Concept – Film Making</p> <p>Curricular Goal: To be able to create a video with various green screen locations for a given purpose</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to create an interactive video. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>Green screen technology can enable video presentations to become more engaging.</u> <u>How green screen technology is used in all aspects of media.</u> <u>That green screen technology can be used in a variety of formats.</u></p> <p>Disciplinary Knowledge: <i>(Being an animator)</i> <u>Understand how to use the green screen technology.</u> <u>Embed a picture/video to use with the green screen technology.</u> <u>Embed video into a file.</u> <u>Edit videos to ensure high quality.</u></p> <p>Key Vocabulary: Purpose, independence.</p>	<p>Links to prior learning: Explain what data should and shouldn't be shared online.</p> <p>Key Concept – Personal Protection</p> <p>Curricular Goal: Construct a code of conduct for working online, messaging and using social media</p> <p>Learning Objective:</p> <ul style="list-style-type: none"> To be able to produce a code of conduct for staying safe online. <p>Substantive Knowledge: (Sticky Knowledge) <i>(To know and remember)</i> <u>To understand the importance of E-Safety.</u> <u>Be able to explain how to protect devices from threats and the potential dangers of using aspects of IT.</u> <u>Justify how to manage risks when working online.</u></p> <p>Disciplinary Knowledge: <i>(Being a technician)</i> <u>Express the importance of E-Safety.</u> <u>Create a code of conduct for working online and messaging electronically.</u> <u>Create a code of conduct for using social media for the whole school.</u></p> <p>Key Vocabulary: Manage risk, social media, virus.</p>

			Computing			
ASD	Working Memory	Dyslexia	SEMH	Speech Language & Communication	Physical Difficulties	Hearing Impaired
<ul style="list-style-type: none"> Pupils on the autistic spectrum may become deeply involved in working in isolation on a computer. They will benefit from clear preparation and support when returning to a group. Programs such as Kar2ouche: Social Communication allow pupils with an autistic spectrum disorder (and others with communication and interaction difficulties) to 'walk their way' through scenarios involving social communication in everyday situations. The package contains tools with which adults can create appropriate scenarios. 	<ul style="list-style-type: none"> Revisiting a mind map of the same area of learning, say after three weeks of studying an ICT topic, can be a good way of assessing – through the added 'branches' of the map – how pupils' understanding of concepts is developing. This approach can be particularly valuable for pupils for whom oral and written communication present a barrier, as pictures and symbols can be included. Display pupils' work, assessment criteria for tasks, or projects and posters to encourage pupils' understanding or trigger their memory. 	<ul style="list-style-type: none"> Revisiting a mind map of the same area of learning, say after three weeks of studying an ICT topic, can be a good way of assessing – through the added 'branches' of the map – how pupils' understanding of concepts is developing. This approach can be particularly valuable for pupils for whom oral and written communication present a barrier, as pictures and symbols can be included. 	<ul style="list-style-type: none"> Reduce the possibility of frustration at not being able to use programs to achieve an objective by having 'how-to' posters on the wall. 	<ul style="list-style-type: none"> using symbol-processing software or a picture communicator for pupils with speech and language communication needs Programs such as Kar2ouche: Social Communication allow pupils with an autistic spectrum disorder (and others with communication and interaction difficulties) to 'walk their way' through scenarios involving social communication in everyday situations. The package contains tools with which adults can create appropriate scenarios. 	<ul style="list-style-type: none"> using head switches, touch screens, or an alternative mouse or keyboard for pupils with reduced motor skills, or adjusting the screen resolution, or using a bigger screen, for pupils with a visual impairment 	<ul style="list-style-type: none"> video presentations have subtitles for deaf or hearing impaired pupils and those with communication difficulties, where required.



Kingswood Parks

PRIMARY SCHOOL