




## Computing Overview

Year Group	Problem solving and Logical Thinking 	Creative Content 	Digital Literacy 
<b>EYFS</b>	<p><b>Autumn -</b> Using the Jolly Postman story to read simple maps and explore routes.</p> <p><b>Spring -</b> Poles Apart - Reading and using Google and world maps.</p> <p><b>Summer -</b> Let's Tell a Story – Creating own treasure maps and putting on routes and navigating courses.</p> <p><u>Multi-disciplinary links - Autumn, Spring and Summer</u> Geography, Maths English links where the children are supported to find out about routes and direction</p>	<p><b>Autumn, Spring and Summer</b> Ongoing skills throughout the year linked to content creation.</p> <p><u>Multi-disciplinary links - Autumn, Spring and Summer</u> Children use a range of media throughout the year across subjects</p> <p><b>Purple Mash Reception - General Computing Skills folder has supporting materials.</b></p>	<p><b>Autumn, Spring and Summer</b> Ongoing skills throughout the year linked to content creation.</p> <p><u>Multi-disciplinary links - Autumn, Spring and Summer</u> Children use a range of media throughout the year across subjects</p> <p><b>Purple Mash Reception - General Computing Skills folder has supporting materials.</b></p>
<b>Year 1</b>	<p><b>Autumn –</b> Bee-bot – Purple Mash 1.7 Instructional language for directions and recording a route</p> <p><b>Autumn and Summer –</b> Instructional writing</p>	<p><b>Autumn –</b> sorting materials using pic-collage (organising digital content)</p> <p>Creating a William Morris inspired repeating pattern using Purple Mash to create a new wallpaper design for Grandma's house.</p>	<p><b>On-going –</b> looking at the layout of a keyboard to write captions/simple sentences using electronic devices. Purple Mash 2Type</p> <p><u>Multi-disciplinary links - ongoing</u></p>

	<p><b>Spring</b> – Following sequences in P.E.</p> <p><b>On-going</b> – Number sequences</p> <p><u><b>Multi-disciplinary links -</b></u></p> <p><b>All Terms</b></p> <p><b>Maths</b> - identifying and extending sequences.</p> <p><b>Autumn Term – Once Upon a Time</b> – Using Maths and Geography to record and describe routes.</p> <p><b>Spring Term</b> PE and Geography – Following and adding to sequences using directional language.</p> <p><b>Autumn and Summer</b> – English work through instructional writing using sequential language.</p>	<p><b>Spring</b> – e-book retelling the story of the Wright Brothers – Purple Mash 1.6</p> <p><b>Summer</b> – e-invitation/card to the seaside day</p> <p><u><b>Multi-disciplinary links -</b></u></p> <p><b>Autumn Term</b></p> <p><b>Science</b> – sorting materials using digital content.</p> <p><b>Autumn Term</b> – English, Maths and Art – using repeated patterns to create a wallpaper design.</p> <p><b>Spring Term</b> English and History – creating stories using electronic tools to combine text and images.</p> <p><b>Summer Term</b> English and Geography as children create an invitation for a day at the seaside.</p>	
<b>Year 2</b>	<p><b>Summer</b> Purple Mash unit 2.1 for coding also use 2Sequence to create music to sequence the notes for music within RE.</p>	<p><b>Autumn, Spring and Summer</b> – Find and retrieve information from a website. See Purple Mash unit 2.5 - Effective Searching -Use a webpage as a resource</p>	<p><b>Summer</b> <i>Create, edit and format text (insert/delete words/use bold/italics/ underline)</i> <i>Communicate safely online.</i></p>

	<p>Use logical reasoning to predict the outcomes of a set of instructions.</p> <p>Program using sequences of instructions to implement an algorithm.</p> <p>Create and debug a simple algorithm.</p> <p>Test and amend a set of instructions.</p> <p><u>Multi-disciplinary links - Summer Term</u></p> <p>RE, Art and Music – Children use coding skills to compose music by sequencing beats.</p>	<p>-Use with purpose, drawing, tools, texts, pictures and animations to create content – eg – presentations, eBooks, animations, videos and record the narration.</p>	<p>Purple Mash 2Email</p>
<p><b>Year 3</b></p>	<p><b>Autumn</b> – Input and Output differences within function machines in maths. Video chat with Y5 who will explain what function machines are later in the year.</p> <p><b>Spring</b> - Orienteering linked to PE and English as children explore directional instructions.</p> <p><b>Summer</b> – To control an online robot with directional instructions</p>	<p><b>Autumn – Famous Artists</b> - To search for images linked to Van Gogh and Hockney before inserting text and images on to a Pic Collage that compares the lives and artwork of these artists.</p> <p><b>Spring</b> – Purple Mash unit 2.7 to manipulate sound and create a composition (linked to events in Stig of the dump)</p>	<p><b>Autumn – Robin Hood</b> - To find relevant information by browsing a menu to find out about Robin Hood. (Google)</p> <p><b>Spring</b> – Using Purple Mash 2Email (unit 3.5 Email as guidance). To open an attachment showing an image of a tunic contained in an email from a customer. Children to reply with a picture of the tunic they have</p>

	<p>(Online robot to represent a Roman soldier, avoid obstructions in order for him to reach his destination). Using Purple Mash unit 3.1</p> <p><u>Multi-disciplinary links - Autumn and Summer Term</u> Geography and Maths – using video chat tools to share what they have learnt about biomes.</p> <p><b>Spring</b> - Orienteering linked to PE and English as children explore directional instructions.</p> <p><b>Summer Term</b> – History link through Roman’s where the children need to write an algorithm for a soldier.</p>	<p><b>Summer</b> – Creating a story using Purple Mash 1.6 section 3. Children focus on using tools such as sound, background, text features and extra pages to engage the audience.</p> <p><u>Multi-disciplinary links - Autumn Term</u> – Art link as the children use Pic Collage tools to represent and share what they have learnt about these famous artists by inserting texts and images.</p> <p><b>Spring Term</b> Music and English as the children use Purple Mash to compose digitally.</p> <p><b>Summer Term</b> – Linked to English and History the children use digital tools to create a story that incorporates text, images, sound to engage the audience.</p>	<p>designed persuading the customer to buy it. To manipulate text when writing the email</p> <p><u>Multi-disciplinary links - Autumn Term</u> - English and Geography as the children use search engines to research Robin Hood.</p> <p><b>Spring Term</b> Stones Age – History, English and D/T as the children use email tools to share what they have learnt about tunics and what they made.</p>
<p><b>Year 4</b></p>	<p><b>Autumn – The Last Bear</b> Design and use classification keys to ask questions and sort species</p> <p><b>Summer</b> - Problem solving and logical thinking using programming</p>	<p><b>Spring – Egypt</b> Create a greenscreen about the gifts of the Nile by capturing images from a range of devices and creating a presentation aimed at a specific audience. Purple Mash unit 3.9 for guidance.</p>	<p><b>Autumn - The Last Bear</b> Use a search engine to find a specific website (focus on temperature variations in Svalbard – cross-curricular link to maths negative numbers) Purple Mash unit 4.7 for guidance.</p>

	<p>to programme a robot. Purple Mash units 4.1 and 4.5</p> <p><u>Multi-disciplinary links -</u>  <b>Autumn Term – Science</b> – Design a classification key using Computing skills to sort different species of animals.</p>	<p><b>Spring - Egypt</b> Creating a comic strip and manipulating the text.</p> <p><u>Multi-disciplinary links -</u>  <b>Spring - Egypt</b> - Historical and English link as the children create a comic strip by manipulating images and the text. They also create presentations within both subjects as well as Geography about the gifts of the Nile</p>	<p><b>Autumn - The Last Bear</b> Navigate using an internet browser - eg use tabbed browsing to open 2 or more web pages at the same time, open a link to a new window</p> <p><u>Multi-disciplinary links -</u>  <b>Autumn Term – Maths, Global Citizenship, English and Geography</b> as the children use search engines to research polar bears – using tabbed browsers.</p>
<b>Year 5</b>	<p><b>All Terms</b> – completing maths problem-solving questions by using decomposition.</p> <p><b>Autumn Term – Harry Potter</b> Plan a website linked to Online Safety. Using Purple Mash unit 5.2 as guidance.</p> <p><b>Spring Term – Greeks</b> History – Using a key to classify the Greek Gods</p> <p><b>Summer Term – WW2</b> History – deciphering a code from WW2 Traffic light input and output Purple Mash Coding unit 5.1</p>	<p><b>Autumn Term – Harry Potter</b> design and create a website homepage with images and links - creating music inspired by Harry Potter using Purple Mash unit 4.9</p> <p><b>Spring Term – Greeks</b> Creating a short film based on a famous Greek person</p> <p><b>Summer Term – WW2</b> Creating a presentation about the Doncaster War Memorial</p> <p><u>Multi-disciplinary links -</u>  <b>Autumn Term – Harry Potter</b> website design links through use of English, music and knowledge of online safety</p>	<p><b>Autumn Term</b> – Using search engines efficiently to research key artists</p> <p><b>Autumn and Summer Term</b> – Video chats to Y3 to share what the children have learnt about biomes as well as inputs and outputs.</p> <p><u>Multi-disciplinary links -</u>  <b>All Year</b>  Search tools are ongoing throughout the year.</p> <p><b>Autumn and Summer Term</b></p>

	<p><b><u>Multi-disciplinary links -</u></b>  <b>Autumn Term</b> – Harry Potter website design links through use of English, music and knowledge of online safety as they need to recognise the sequence.  <b>Spring Term</b> – Greeks - Using decompositions skills to arrange gods and goddesses.  <b>Summer Term</b> – WW2 – History and skills of decomposition to crack codes.  Local Area – Geography, Maths and Global Citizenship links as the children complete traffic surveys and work out how to use sensors.</p>	<p>as they need to recognise best way to present their information.  <b>Spring Term</b> – Greeks - Using simple film editing skills to share historical knowledge of a famous Greek character after being written up in English.  <b>Summer Term</b> – WW2 – Using presentation skills within History and English as they write about why Doncaster should be a chosen site.</p>	<p>Geography and Maths – using video chat tools to share what they have learnt about biomes.</p>
<b>Year 6</b>	<p><b>All Terms</b> – completing maths problem-solving questions by using decomposition.  <b>Autumn Term – South America</b>  Classification work linked to science.  <b>Spring Term – Pig Heart Boy</b>  Choreographing a dance routine through designing, writing and debugging. Creating circuits within science by altering the number of batteries or bulbs.</p>	<p><b>Autumn Term – South America</b>  Documentary making. Using editing tools and adding special effects and musical compositions. Using iMovie and Garageband  <b>Spring Term – Pig Heart Boy</b> – Using 2Graph to experiment with the charts and best way to share results. Creating adverts to sell an electronic game.  <b>Summer Term</b> – Creating information posters about France.  <u><b>Multi-disciplinary links -</b></u></p>	<p><b>Autumn and Spring Terms</b> – Using search engines efficiently to find specific pages.  <b>Autumn and Summer Terms</b> – Using formatting tools to enhance the text.  <u><b>Multi-disciplinary links -</b></u>  Search tools are ongoing throughout the year.</p>

	<p><b>Summer Term – Vikings</b> History - designing, writing and debugging programs for a robot using sensors. Guidance through Purple Mash Coding 6.1</p> <p><u><b>Multi-disciplinary links -</b></u></p> <p><b>Autumn Term</b> – Classifying species of plant science by designing, writing and explaining how the algorithm that is produced works.</p> <p><b>Spring Term</b> – Dance routines within PE to represent the flow of blood cells so linked to science. Also, in science when investigating circuits within science to experiment with ‘What if?’ questions</p> <p><b>Summer Term</b> – History Using robots to design, write and debug algorithms to act like Viking warriors.</p>	<p><b>Autumn Term</b> – English, Geography, Global Citizenship, Music and History link as the children are pulling together everything into a documentary.</p> <p><b>Spring Term</b> – Science and Maths where the children are using graphing tools to represent the data. Within English, Art, D/T and Science to promote their advert.</p> <p><b>Summer Term</b> – Link to French and art as the children are creating collages linked to Paris.</p>	
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