Meldreth Primary School Whole School Curriculum Map: Computing Long Term Plan



This curriculum provides a starting block for schools to embark on teaching an effective and engaging curriculum. In the recent *After the reboot: computing education in UK schools* (2018), it was stated that in order for children to leave school and "to embark on successful professional careers and to become astute and responsible citizens...children should begin to study computing at the earliest age possible".

The resources are drawn mostly from the Purple Mash and Project Evolve units of work however there is a termly opportunity for students to link computing with another subject and create a piece of work more personalised to their individual experience as a student of Meldreth Primary. The planning has been divided into three sections: digital literacy, which incorporates E-Safety refreshed at the beginning of every term; computer science; and information technology.



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	E-safety: Project Evolve Exploring Purple Mash Grouping & Sorting	2Count: Pictograms 2DIY: Lego Builders	E-safety: Project Evolve 2Go: Maze Explorers	2Create A Story: Animated Story Books	E-safety: Project Evolve 2Code: Coding	2Calculate: Spreadsheets Technology Outside School
Year 2	E-safety: Project Evolve 2Calculate: Spreadsheets	2Code: Coding	E-safety: Project Evolve 2Question/2Investiage: Questioning	Effective Searching 2Sequence: Making Music	E-safety: Project Evolve 2Paint A Picture: Creating Pictures	Presenting Ideas
Year 3	E-safety: Project Evolve 2Calculate: Spreadsheets	2Code: Coding	E-safety: Project Evolve 2Type: Touch Typing	2Email: Email & Email Safety	E-safety: Project Evolve 2Question: Branching Databases 2Simulate: Simulations	2Graph: Graphing Google Slides: Presenting
Year 4	E-safety: Project Evolve 2Calculate: Spreadsheets	2Code: Coding	<mark>E-safety: Project Evolve</mark> 2Logo: Logo	Writing for different audiences	E-safety: Project Evolve 2Animate: Animation Hardware Investigators	Effective Searching Busy Beats: Making Music
Year 5	E-safety: Project Evolve 2Calculate: Spreadsheets	2Code: Coding	E-safety: Project Evolve 2Investigate: Databases	2Design & Make: 3D Modelling 2Connect: Concept Maps	E-safety: Project Evolve 2DIY 3D: Game Creator	Google Docs: Word Processing
Year 6	E-safety: Project Evolve 2Calculate: Spreadsheets	2Code: Coding	E-safety: Project Evolve 2Blog: Blogging	2Code/2Connect: Text Adventures Networks	E-safety: Project Evolve 2Quiz: Quizzing	2Code: Understanding Binary Google Sheets: Spreadsheets



Termly Cross-Curricular Use of Computing:

	Autumn Term	Spring Term	Summer Term
Year 1	Maths – build on grouping and sorting skills by using the shape colour group sorting application on ipads.	English: Rewrite a Fairy Tale using the animated story book app	PE (OAA) – guiding a robot (blindfolded child) around school focusing on giving simple instructions for them to follow. Thinking of possible consequences of giving an incorrect instruction.
Year 2	English: Typing up letter to Santa	Music: Dragon theme tunes Maths: Making block diagrams	Art: Creating pictures inspired by artists studied
Year 3	Topic: Type a post-card using Purple Mash as a summary of our topic. RE: Use iPads to record videos re-telling a religious story.	Maths: Collect data and use Purple Mash 2Graph to create bar and pie charts.	English: Research countries of the world.
Year 4	Topic: Research on the area of topic we are learning about English: Type up stories Maths: Make statistics charts on Purple Mash to go with their Christmas advert debate - create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	English: Type up their newspaper articles all about natural disasters or climate change.	Topic: Research on the area of topic we are learning about Topic: Digital
Year 5	Art: Use Ipads to take pictures showcasing perspective then upload and edit	English: Type up and format Alma newspaper report in Google Docs with columns, images and captions	Maths: Collect data & use Google Sheets to present in a variety of ways, e.g. line graph, pie chart
Year 6	Art: Creating and designing kites using a variety of media (to include designing on PurpleMash alongside sketching, painting etc.).	PSHE: Use spreadsheets to create a budget (Financial Capability unit). Science: Researching and presenting using Google Slides (Famous Scientists unit).	History: Researching a variety of sources to independently research and present an aspect of the history topic that they find interesting. PSHE: Designing and formatting leaflets about moving to secondary school (Managing Change unit).



Computing in EYFS:

Early Years Foundation Stage will explore a range of different cause & effect ICT resources and access lpads, using programmes related to the child-led topics within the EYFS framework. Their learning will be centred around play-based, unplugged activities that focus on building children's listening skills, curiosity, creativity and problem solving. They will use suitable age-related Purple Mash programmes to support their learning. They will use physical computing during role-play and have access to items such as Bee-bots as an early introduction to coding and programming and tablets and cameras to explore the world around them.

Computing

Our goal for Computing education is that children are able to use computational thinking and creativity to understand and change the world, through the 'big ideas':

- Digital Literacy I use technology responsibly and safely to find, evaluate and communicate information;
- Information Technology I use and combine a variety of software on a range of digital devices to express myself and present my ideas; and
- Computer Science I use logical thinking to design, create and analyse algorithms and code a range of different programs.