



Computing scheme of work (from Sep 2020) -

Christian values underpinning learning - Love, respect, determination, creation, creativity and peace

Intent

The National Curriculum (2014) forms the basis for all subject teaching ensuring continuity and progression in an age related curriculum. In addition, teachers make sure the content is relevant and stimulating by delivering through themes and topics.

Our computing curriculum has been developed because we believe that:

- Technology plays such a significant role in society today; children need to be able to participate safely in this digital world and identify where to go for help and support if they have any concerns.
- Children need to be able to search effectively and evaluate digital content.
- Children can develop their problem solving skills using logical reasoning to explain how simple algorithms work and to investigate and correct errors.
- Children need to understand and experience how technology can be used for communication and collaboration in the wider world.
- Children need to be creators and have the opportunity to express themselves and their ideas using a range of software responsibly.
- Children should be confident to select and use a variety of software to design and create a range of programs and content to accomplish given goals such as, collecting and presenting data and information.

Implementation

Computing will be taught weekly and links to class topics should be explored when appropriate. Opportunities for children to use technology across other areas of the curriculum should be planned where possible. It is essential that staff plan to ensure that content and skills are taught and that a progression of skills is evident across year groups. Children will have access to Chromebooks and Ipads so they can experience a range of devices to support the delivery of the Computing curriculum. We will be following 123ICT Scheme of work and will use some units/apps from Purple Mash to enhance the teaching and learning of specific areas.



Area	Oak – Reception	Poplar – Y1/2	Willow – Y3/4	Maple – Y5/6
Computing curriculum content	<p>FS</p> <p>Communication and language development involves giving children opportunities to experience a rich language environment; to develop their confidence and skills in expressing themselves; and to speak and listen in a range of situations.</p> <p>Understanding the world involves guiding children to make sense of their physical world and their community through opportunities to explore, observe and find out about people, places, technology and the environment.</p> <p>Expressive arts and design involves enabling children to explore and play with a wide range of media and materials, as well as providing opportunities and encouragement for sharing their thoughts, ideas and feelings through a variety of activities in art, music, movement, dance, role-play,</p>	<p>Years 1 and 2</p> <p>Pupils understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions.</p> <p>Pupils create and debug simple programs.</p> <p>Pupils use logical reasoning to predict the behaviour of simple programs.</p> <p>Pupils use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>Pupils recognise common uses of information technology beyond school.</p> <p>Pupils use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</p>	<p>Years 3 and 4</p> <p>Pupils design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p>Pupils use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>Pupils use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</p> <p>Pupils understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration.</p> <p>Pupils use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p> <p>Pupils select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including</p>	<p>Years 5 and 6</p> <p>Pupils design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p>Pupils use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>Pupils use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</p> <p>Pupils understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration.</p> <p>Pupils use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p> <p>Pupils select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including</p>



Achieving together

	and design and technology.		collecting, analysing, evaluating and presenting data and information. Pupils use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	collecting, analysing, evaluating and presenting data and information. Pupils use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
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Log in to 123 ICT/Purple Mash to see unit plans.

<p>Oak (Reception) Children of Reception age will receive a broad experience of computing through provision activities, and links within their topics. Children will learn how to use technology safely and responsibly, they will take part in Online Safety Days and the use of appropriate apps from Purple Mash will be planned to suit their topics and demonstrate links to the seven areas of learning and development from the EYFS framework.</p>						
Communication and language	Expressive Arts	Literacy	Mathematics	Physical Development	PSED	Understanding the world
2 Paint a picture 2 Beat 2 Explore 2 Go – this can be used alongside Beebots.	2 Paint a picture 2 Beat 2 Explore Paint Projects	Alphabet Slideshows 2 Create a Story 2 Publish Teach your Monster to Read (app on the ipads).	Number Paint Projects 2 Count A -fish-metic	2 Count	Using an ipad/chromebook safely and confidently, logging in, how to store them, charging etc.	Exploring technology for different purposes, home and school, various jobs etc.

Year A	Term 1a	Term 1b	Term 2a	Term 2b	Term 3a	Term 3b
Poplar (Y1/2)	Online Safety Intro Effective searching	2sequence – Purple Mash	Graphics	Online Safety Experts Ebook	Animation	Bee-Bot Fun 2Go – Purple Mash



Achieving together

Willow (Y3/4)	Introducing SMART Rules Online Safety Presentation	Scratch Animation	Scratch Quiz 2Type – Purple Mash	SMART Rule Podcast Animation	Green Screen Presentation	Augmented Reality
Maple (Y5/6)	Networks, the Internet and searching GarageBand Music	SMART Rule Podcast	E-book	Augmented Reality	Spreadsheets	MicroBit intro

Year B	Term 1a	Term 1b	Term 2a	Term 2b	Term 3a	Term 3b
Poplar (Y1/2)	Online Safety intro Effective Searching	Bee-Bot Fun 2Go – Purple Mash	Scratch Junior Introduction	Ebook 2Count (pictograms/maths) – Purple Mash	Online Safety Experts	Graphics
Willow (Y3/4)	Introducing SMART Rules Online Safety Presentation	Scratch Animation	Garage Band Music	SMART Rule Podcast 2 Type – Purple Mash	Ebook	Animation
Maple (Y5/6)	Online Safety Presentation Networks, the Internet and searching	Animation	Green Screen Presentation	Online Safety Comic	Scratch Quiz	Scratch Game

Assessment in computing:

- Pupil voice
- Saved work



- Displays, images and speech bubbles – opportunity to practice skills, varied and engaging curriculum, showcased final pieces, clear progression in skills

Role of the co-ordinator:

- Celebrate successes
- Collate appropriate evidence over time
- Monitor the standards in the subject to ensure that outcomes are at expected levels
- Provide ongoing support/ signposting