Curry Mallet CofE VC Primary School

Computing Curriculum Overview

Our curriculum approach to computing reflects our ethos statement 'We live life in all its fullness'. In particular, we are keen for pupils to discover their own passion for computational thinking and learning.

Intent

For all children to learn, apply, experience and enjoy computing and technology throughout their primary school years. To provide opportunities for children to explore a range of technology that will help to develop their awareness of technology in everyday lives and experience these technologies through a hands-on approach. To ensure that the teaching of Online Safety and Computing is both discrete and cross-curricular. To provide opportunities for a range of programmes to be used effectively and to support pupils' transition to secondary school. To equip children with ways to be aware of their own digital footprint in an ever-changing era of technology.

Implementation

In KS1 and KS2, class teachers deliver units of lessons that have been designed and carefully sequenced to structure learning for progression within our rolling programs for each year group. These lesson plans are provided by Teach Computing. We also use Elim age appropriate termly key stage online safety assemblies which are delivered and then if appropriate are developed and explored further in each class. All children have access to technology across the school and technology to support their learning.

Impact

Children enjoy and experience technology that they may not have access to in other areas of their lives. Children are able to use and apply technology to develop skills across programming, multimedia and online safety. Children gain confidence in using a range of technologies and share their knowledge and understanding with parents and the wider community.

Planning

We subscribe to Teach Computing for access to planning documents for each year group, which offers clear knowledge and skills progression across the year and year groups. It covers all 4 key areas of the curriculum including (programming, multimedia, technology in our lives and data handling). Woven within each planning unit is online safety, plans provide appropriate termly key stage online safety assemblies, linked to their online safety active bytes knowledge grids.

Knowledge and skills progression through the school

Computing skills and knowledge will be developed through building on previous levels of understanding on Technology in Our Lives, Multimedia, Data handling, Online safety and Programing.

In KS1 children are taught

: **Problem Solving**

- Understand what algorithms are

- Understand how algorithms are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions

Programming:

- Create and debug simple programs

Logical Thinking:

- Use logical reasoning to predict the behaviour of simple programs

Online Safety:

- 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

Using IT beyond the school:

- Recognise common uses of information technology beyond school

Creative Content:

- Use technology purposefully to organise, store and retrieve digital content
- Use technology purposefully to create and manipulate digital content

In KS2 knowledge and skills will be further developed as children are taught : Problem solving

- Design, write and debug programs that accomplish specific goals
- Controlling or simulating physical systems
- Solve problems by decomposing them into smaller parts

Programming

- Use sequence, selection and repetition in programs; work with variables.
- Work with various forms of input and output.

Logical Thinking

- Use logical reasoning to explain how some simple algorithms work.
- Use logical reasoning to detect and correct errors in algorithms and programs.
- Understand computer networks including the internet.
- Understand how networks can provide multiple services, such as the world wide web.

Online Safety

- Use technology safely, respectfully and responsibly.
- Recognise acceptable/unacceptable behaviour.
- Know a range of ways to report concerns and inappropriate behaviour. Be discerning in evaluating digital content.
- Understand the opportunities networks offer for communication and collaboration.

Creating Content Year 3 and Year 4

- Collecting, analysing, evaluating and presenting data and information
- Select, use and combine a variety of software (including internet services) on a range of digital devices. Design and create a range of programs, systems and content that accomplish given goals.

Searching

Year 3 and Year 4

- Use search technologies effectively
- Appreciate how search results are selected and ranked

Recording

There will be minimal written recording. Each class will have an online safety display to showcase the children's knowledge and understanding linked to the termly online safety assembly. Teachers will assess the children on their increasing knowledge and skills which will inform the support given in their next lesson.

Monitoring

Computing lead monitors to ensure that units are being taught at the correct time. Computing lead to complete learning walks, speak to pupils about their learning and discuss with colleagues what has gone well. Computing lead to be made available to offer subject knowledge and advice when needed to support teaching staff in their understanding and delivery of the curriculum.

Review

October 2024

Curry Mallet CofE VC Primary School

Computing Rolling Program 2022 - 2025

Class 1

		Autumn	Autumn 2	Spring	Spring 2	Summer	Summer 2
Year A	**Topic**	Computing systems and networks – technology around us	Creating Media – digital painting Paint Program	Programming A - Moving a Robot	Data and Information - Grouping Data	Creating Media – digital writing	Programming B - Programming Animations
	Online Safety Lessons	I am Kind and responsible; evaluating content, reporting/ supporting https://staffonly.somerset.org.uk/sites/edte	I am Kind and responsible; Kindness https://staffonly.somerset.org.uk/sites/edtech/BYTE%2020 17/Year%20 1/Y1%20Activ	I am safe and secure; relationships, privacy and protecting devices https://staffonly.somerset.org.uk/sites/edte	I am safe and secure; Privacy https://staffonly.somerset.org.uk/sites/edtech/BYTE%2020 17/Year%20 1/Y1%20Activ	I am healthy; age appropriate https://staffonly.somerset.org.uk/sites/edtech/BYTE%2020 17/Year%20 1/Y1%20Activ	I am health; lifestyle choices https://staffonly.somerset.org.uk/sites/edtech/BYTE%2020 17/Year%20 1/Y1%20Activ

Follow this link to access planning https://teachcomputing.org/curriculum/key-stage-1

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Class 2

		Autumn	Autumn 2	Spring	Spring 2	Summer	Summer 2
Year A (22/23)	**Topic**	Computing systems and networks – Technology around us (Y2)	Creating Media – Audio editing (Y3)	Programming A – Robot Algorithms (Y2)	• Data and Information – Branching databases (Y3)	• Creating Media – Desktop Publishing (Y3)	Programming B – Repetition in games (Y2)
	Online Safety	Year 2 Autumn A	Year 3 Autumn B	Year 4 Spring A	Year 2 Spring B	Year 3 Summer A	Year 4 Summer 2
Year B	**Topic**	Computing systems and networks – Connecting computers (Y3)	Creating Media – Digital photography (Y2)	Programming A – Repetition in shapes (Y3)	Data and Information – Data Logging (Y2)	Creating Media – Making Music (Y2)	Programming B – Events and actions in programs (Y3)

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	Online Safety	Year 4 Autumn A	Year 2 Autumn B	Year 3 Spring A	Year 4 Spring B	Year 2 Summer A	Year 3 Summer B
Year C (24/25)	**Topic**	Computing systems and networks – The Internet (Y4)	Creating Media – stop frame animation	Programming A – Sequencing sounds (Y3)	Data and Information – Pictograms (Y2)	Creating Media – Photo Editing (Y4)	Programming B – Programming Quizzes (Y2)
	Online Safety	Year 3 Autumn A	Year 4 Autumn B	Year 2 Spring A	Year 3 Spring B	Year 4 Summer A	Year 2 Summer B

Class 3

		Autumn	Autumn 2	Spring	Spring 2	Summer	Summer 2
Year A (22/23)	**Topic**	Computing systems and networks - Sharing information (Y4)	Creating Media – Audio editing (Y4)	Programming A - Selection in physical computing (Y4)	Data and Information – Introduction to spreadsheets (Y6)	Creating Media – 3D modelling (Y6)	Programming B - Repetition in games (Y4)
	Online Safety	Year 5 Autumn A	Year 6 Autumn B	Year 4 Spring A	Year 5 Spring B	Year 6 Summer A	Year 4 Summer 2
Year B(23/24)	**Topic**	Computing systems and networks – internet connection (Y6)	Creating Media – Video editing (Y5)	Programming A – Repetition in shapes (Y5)	Data and Information – Data Logging (Y4)	Creating Media – Vector Drawing (Y5)	Programming B – Sensing (Y5)

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	Online Safety	Year 4 Autumn A	Year 5 Autumn B	Year 6 Spring A	Year 4 Spring B	Year 5 Summer A	Year 6 Summer B
Year C (24/25)	**Topic**	Computing systems and networks - The Internet (Y4/5)	Creating Media – Webpage creation (Y6)	Programming A -Variables in games (Y6)	Data and Information – Flat file databases (Y5)	Creating Media - Photo Editing (Y4)	Programming B – Selection in quizzes (Y5)
	Online Safety	Year 6 Autumn A	Year 4 Autumn B	Year 5 Spring A	Year 6 Spring B	Year 4 Summer A	Year 5 Summer B

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