Computing Long Term Plan

Intent:

At our school, Computing is taught using **Purple Mash** to equip pupils with the essential digital skills, knowledge, and understanding they need to thrive in an increasingly technological world. Our curriculum aims to develop confident, responsible, and creative users of technology who can use digital tools safely and effectively. Through Purple Mash, pupils learn to think logically, solve problems, and express themselves creatively while understanding how technology impacts the wider world.

The curriculum is designed to ensure progression in **computer science, information technology, and digital literacy**, including online safety. We aim for all pupils to become competent in using technology to support learning across the curriculum, while developing resilience, curiosity, and independence.

Implementation:

Computing is taught weekly using the **Purple Mash scheme**, which provides a structured, progressive curriculum from EYFS to Year 6.

Lessons are carefully sequenced to build on prior knowledge and skills, ensuring clear progression in coding, digital creation, and understanding of technology systems.

Key aspects of implementation include:

- Use of **Purple Mash tools** such as coding, spreadsheets, writing, and design programs.
- Explicit teaching of **online safety**, revisited regularly and embedded across the curriculum.
- Opportunities for pupils to work independently and collaboratively to solve problems.
- Adaptations to support all learners, including SEND pupils.

Cross-curricular links that allow pupils to apply computing skills in meaningful contexts.

Impact:

The impact of our Computing curriculum is that pupils become confident, capable users of technology who can apply their skills across a range of subjects. Pupils demonstrate strong problem-solving abilities, logical thinking, and creativity, and are able to explain how technology works and how to use it safely.

By the time pupils leave our school, they:

- Have a secure understanding of **coding and computational thinking**.
- Can use digital tools to **create, organise, and present information**.
- Understand how to stay **safe and responsible online**.
- Show independence, resilience, and confidence when using technology.

The impact is evident through pupil outcomes, engagement in lessons, pupil voice, and the effective application of computing skills across the wider curriculum.

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EYFS Activities

Communication and Language	Interactive stories, listening games, picture pro character-based activities	Encourages listening, attention, understanding, and expressive language through discussion and questioning
Physical Development	Click-and-drag games, drawing tools, puzzles, touchscreen activities	Develops fine motor control, hand–eye coordination, and confidence using technology
Personal, Social and Emotional Development (PSED)	Turn-taking games, routine-based activities, en themed stories	Builds confidence, independence, cooperation, and awareness of feelings
Literacy	Phonics games, letter recognition, story sequer early writing tools	Supports early reading skills, phonological awareness, mark-making, and comprehension
Mathematics	Counting games, number matching, shape and	Develops early number sense, problem-solving, and mathematical language activities
Understanding the World	Technology exploration, topic-based games (e.g animals, seasons), cause-and-effect activities	Encourages curiosity, awareness of technology, and understanding of the world around them
Expressive Arts and Design	Digital painting, music and sound games, creative role-play activities	Supports creativity, imagination, and self-expression using digital media

Cycle A Year 1/2	1.1 Online safety and exploring Purple Mash	2.5 Effective Searching	1.4 Lego Builders	1.9 Technology outside school	1.2 Grouping and sorting	2.6 Creating Pictures	1.7 Coding	2.1 Coding
Cycle B Year 1/2	1.1 Online Safety and exploring Purple Mash	1.5 Maze Explorers	2.4 Questioning	2.2 Online Safety	1.6 Animated story books	2.7 Making Music	2.3 Spread-sheets	1.3 Picto-grams

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Cycle A Year 3/4	. **Coding**	4.2 Online safety	4.4 Writing for different audiences	4.5 Logo	4.6 Animation	4.7 Effective Search	4.8 Hardware investigators	3.9 Presenting with Microsoft PowerPoint or Google slides
Cycle B Year 3/4	1.1 Online Safety and exploring Purple Mash	1.5 Maze Explorers	2.4 Questioning	2.2 Online Safety	1.6 Animated story books	2.7 Making Music	2.3 Spreadsheets	

Coding Breakdown

YEAR 3 & 4 - CYCLE A					
Using Flowcharts Unit 3.1, Lesson 1	Using Timers Unit 3.1, Lesson 2	'if' statements Unit 4.1, Lesson 2	Coordinates Unit 4.1, Lesson 3	Code, Test and Debug – Unit 3.1, Lesson 4	Design, Code, Test and Debug Unit 4.1, Lesson 1
YEAR 3 & 4 - CYCLE B					
Using Repeat Unit 3.1, Lesson 3	Repeat Until and 'if/else' Statements Unit 4.1, Lesson 4	Number Variables Unit 4.1, Lesson 5	Design and Make an Interactive scene Unit 3.1, Lesson 5-6		Making a Playable game – Unit 4.1, Lesson 6

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Cycle A Year 5/6	Coding	5.2 Online safety	5.3 Spread sheets	5.4 Data bases	5.5 Game creator	5.6 3D Mod-elling	5.7 Con-cept Maps	
Cycle B Year 5/6	See table Coding	6.2 Online safety	6.4 Blogging	5.9 Using external devices	Crumble	6.6 Net-works		

Coding Breakdown

YEAR 5 & 6 - CYCLE A					
Coding Efficiently Unit 5.1, Lesson 1	Simulating a physical system Unit 5.1, Lesson 2	Friction and Functions Unit 5.1, Lesson 4	Introducing Strings Unit 5.1, Lesson 5	Text Variable and Concatenation Unit 5.1, Lesson 6	User Input Unit 6.1, Lesson 5
YEAR 5 & 6 - CYCLE B					
Designing and writing a more complex program Unit 6.1, Lessons 1 & 2		Decomposition and Abstraction Unit 5.1, Lesson 3	Using Functions Unit 6.1, Lesson 3	Flowcharts and control simulations Unit 6.1, Lesson 4	Text Adventure Unit 6.1, Lesson 6