Curriculum Statement for Computing

Empowering Digital Learners for a Connected World

At Red Oaks, we believe that digital literacy is one of the most important skills a child can develop during their learning journey. In today's modern world, the online environment offers exciting opportunities—but it also presents challenges. Our computing curriculum is designed to help children navigate the digital world safely, purposefully, and confidently.

Intent

Our aim is to:

- Equip children with the skills to use technology effectively and responsibly.
- Foster curiosity, creativity, and critical thinking through digital exploration.
- Promote safe online behaviour and digital citizenship.
- Ensure children understand the positive impact technology can have when used correctly.
- Prepare pupils for a future where digital competence is essential across all areas of life and learning.

We want every child to leave Red Oaks with the confidence to use technology safely and the skills to thrive in a digital world.

Implementation

Computing is taught through **weekly dedicated lessons** and is also **integrated across the wider curriculum**, enhancing subjects such as English, science, and history. Children use technology to explore places they may never visit, travel through time, and engage with learning in exciting and meaningful ways.

We use **Purple Mash** to deliver our computing curriculum. This platform:

- Covers the essential knowledge and skills outlined in the National Curriculum
- Provides real-world software simulations to ensure skills are transferable
- Supports progression through three key strands:
    - **Computer Science**
    - **Information Technology**
    - **Digital Literacy** (including Online Safety)

From **Year 1 to Year 6**, children complete between **8–12 units per year**, covering topics such as coding, networking, and data handling. Vocabulary is consistent across year groups, with more technical terms introduced in Upper KS2.

In **Early Years**, children explore technology through continuous provision, focusing on hardware and familiarising themselves with the look and feel of devices used higher up the school.

We are fortunate to have access to a wide range of modern equipment, including:

- **VR headsets**
- **iPads and laptops**
- **An AR sandbox**

These tools allow us to be creative in our teaching and provide children with unique, immersive experiences.

Online Safety

Online safety is a core part of our computing curriculum. It is taught at the **start of every lesson** and follows the **eight key areas** outlined in the government's *Education for a Connected World* framework. Lessons include:

- PowerPoints with discussion prompts
- Opportunities for reflection and sharing personal experiences
- Age-appropriate content that progresses year by year

This consistent approach helps children feel confident discussing online safety and ensures we stay responsive to the rapidly evolving digital landscape.

Impact

Through our computing curriculum, children at Red Oaks:

- Develop essential digital skills and confidence in using technology
- Understand how to stay safe online and respect others in digital spaces
- Apply computing knowledge across the curriculum
- Build resilience, creativity, and problem-solving abilities
- Are well-prepared for the digital demands of secondary school and beyond

At Red Oaks, computing is more than just using devices—it's about empowering children to be thoughtful, responsible, and innovative digital citizens.

	Autumn 1	***Autumn 2***	***Spring 1***	***Spring 2***	***Summer 1***	***Summer 2***
Reception	Mouse and Trackpad Skills	Keyboard Skills	Robots	Hardware	Sounds	Using Purple Mash with an Individual Login

"Computing units are delivered progressively throughout the academic year. While some units consist of four lessons, others are longer and may extend across two terms to allow for deeper exploration and skill development."

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Introduction to PM	Route Explorers	Email	Unpacking Hardware & Software	Quizzing	Networks
Creative Computing	The Internet	Route Planners	Animation	Databases	Graphing
Data Explorers	Creating Pictures	Branching Databases	Logo	Game Creator	Blogging
Creating & Following Instructions	Spreadsheets	Spreadsheets	Sound Stories	Spreadsheets	Data Detectives
Animated Stories	Questioning	Coding	Effective Searching	Coding	Coding
Coding	Coding	Presentations	Coding	Word Processing	Introduction to Python
Technology Around Us	Presenting Ideas	Touch Typing	Composing Beats	Concept Maps	Spreadsheets
Making Beats	Making Music	-	Introduction to AI	-	3D Modelling

Useful links

https://www.purplemash.com/sch/redoaks-sn25#/
Purple Mash
https://www.mini-mash.com/login#/email-login
Mini Mash for our younger learners
Home - UK Bebras

An annual international competition that introduces **computational thinking** through engaging puzzles and problem-solving tasks. Suitable for children aged 6–19. No prior programming experience needed. Free to enter and run in schools or at home.

Primary school resources to teach online safety | Internet Matters

A comprehensive hub of **free online safety teaching materials** for KS1 and KS2. Covers cyberbullying, misinformation, and online challenges

Parents and Carers - UK Safer Internet Centre
Offers **tips, advice, and downloadable guides** to help parents support their child's safe and responsible use of technology. Includes phones, tablets, gaming, and social media