

Computing:

Statement of Intent, Implementation and Impact

Curriculum Intent for Computing: What we are trying to achieve with our D&T Curriculum

At Water Street we understand the immense value that technology plays not only in supporting the Computing and whole school curriculum but overall in the day-to-day life of our school. Our aims are to fulfil the requirements of the National Curriculum for Computing whilst also providing enhanced collaborative learning opportunities, engagement in rich content and supporting pupil's conceptual understanding of new concepts which support the needs of all our pupils.

“A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world...core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content.”

National Curriculum

Our Computing curriculum and teaching has links with mathematics, science and design and technology and our aim is to provide a broad and balanced curriculum whilst ensuring that pupils become digitally literate and digitally resilient. Technology is ever evolving and we aim to develop pupils who can use and express themselves, develop their ideas through, information and communication technology at a suitable level for the future workplace and as active participants in a digital world.

The aims of our Computing curriculum are to develop pupils who:

Are responsible, competent, confident and creative users of information and communication technology.

Know how to keep themselves safe whilst using technology and on the internet and be able to minimise risk to themselves and others.

Become responsible, respectful and competent users of data, information and communication technology.

Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.

Can analyse problems in computational terms, and have repeated practical experience writing computer programs in order to solve such problems.

Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.

Become digitally literate and are active participants in a digital world.

Are equipped with the capability to use technology throughout their lives.

Understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.

Have a 'can do' attitude when engaging with technology and its associated resources.

Utilise computational thinking beyond the Computing curriculum.

Understand and follow the SMART E-Safety rules.

Understand the E-Safety messages can keep them safe online.

Know who to contact if they have concerns.

Apply their learning in a range of contexts, e.g. at school and at home.

Implementation: How do we deliver the Computing curriculum

To ensure high standards of teaching and learning in computing, we implement a curriculum that is progressive throughout the whole school. Our implementation of the computing curriculum is in line with 2014 Primary National Curriculum requirements for KS1 and KS2 and the Foundation Stage Curriculum in England. This provides a broad framework and outlines the knowledge and skills taught in each key stage.

We use and follow the Purple Mash scheme of work from Year 1-6, ensuring consistency and progression throughout the school.

The Purple Mash scheme of work enables clear coverage of the computing curriculum whilst also providing support and CPD for less confident teachers to deliver lessons.

The Purple Mash Lessons are broken down into weekly units, usually with two units taught per half-term. Units are practical and engaging and allow computing lessons to be hands on. Units cover a broad range of computing components such as coding, spreadsheets, Internet and Email, Databases, Communication networks, touch typing, animation and online safety.

When teaching computing teachers can follow the children's interests to ensure their learning is engaging, broad and balanced. Teachers ensure that ICT and computing capability is also achieved through core and foundation subjects and where appropriate and necessary ICT and computing should be incorporated into work for all subjects where possible.

Through our Purple Mash subscription our teachers can deliver thematic, cross curricular lessons that also follow children's interests and provide flexibility. Purple Mash has an online portal of age-appropriate software, games and activities as well as topic materials and materials to support children's learning in other subject areas for all key stages.

Computing teaching is practical and engaging and a variety of teaching approaches and activities are provided based on teacher judgement and pupil ability. Teachers and pupils are aware of the

importance of health and safety and pupils are always supervised when using technology and accessing the internet.

Our pupils are fully encouraged to engage with ICT and technology outside of school. Each teacher and pupil has their own unique Purple Mash login and password. Computing work can be stored and saved using pupil log in details and homework or '2do's' can also be set for pupils to access and complete tasks at home that link with their current class learning. Water Street also uses Tapestry for Reception and Year 1 pupils and Seesaw is used from Year 2 to Year 6 for homework and ad hoc communication.

We provide a variety of opportunities for computing learning inside and outside the classroom. Computing and safeguarding go hand in hand and we provide a huge focus on internet safety inside and outside of the classroom. Additional to all pupils studying an online safety unit through their computing lessons, every year we also take part in National Safer Internet Day in February. The Computing subject leader, alongside class teachers, will plan additional internet safety lessons and activities.

Impact: What difference is the curriculum making to our pupils?

Our Computing Curriculum is high quality, well thought out and is planned to demonstrate progression and build on and embed current skills. Children become increasingly proficient on school equipment and have good, transferable knowledge and understanding of online safety which is transferred into their own lives.

Through Purple Mash, Tapestry and Seesaw, children have a broad base of transferable knowledge which can be used on other similar platforms.

Pupil voice, subject monitoring and lesson observations all ensure a positive impact of computing as a subject.

