Subject on a Page

Computing

Intent - We aim to...

Children are able to find, evaluate, utilise, share and create content using information technology and the internet

Children understand how digital technology systems work and can use and program algorithms to achieve specific outcomes

Use of computers and technology for functional purposes such as collecting and presenting information or using search technology

Children are able to use all technology safely, identifying threats to themselves and others

Implementation - How do we achieve our aims?

Knowledge-led curriculum

Teachers will use a knowledge-led curriculum to teach computing in order to ensure key knowledge and skills are built upon throughout each year. This knowledge will be broken down into three different core topics consisting of; Digital Literacy, Computer Science and Information Technology.

Key concepts

- Digital Literacy
- Computer Science
- Information Technology

A consistent approach

A consistent approach to computing will be achieved by all staff teaching from the Purple Mash curriculum, this ensures each year the lessons follow a progression path that builds upon previously taught knowledge and skills. All staff have access to the Purple Mash resources and lesson plans explaining what should be taught in each lesson thereby ensuring a consistent approach.

Developing Key Skills

Children will develop skills such as typing at speed and how to code, these are skills that are becoming more critical in an IT-led world and will be carried over into future IT learning and careers. Other skills developed alongside an IT curriculum are the skills to present and problem solve and develop critical thinking through tasks that challenge pupils to think independently and apply their knowledge to a variety of areas

Key skills

In EYFS you will see...

Children being exposed to early examples of technology in fun and interactive ways; such as Beebots and cameras, that allows them to begin building confidence in handling electronic equipment safely and the basics of operations such as turning a device on and off. This will be taught alongside the early years framework linking in to their Early Learning Goals.

Access to Technology

Children have access to a wide range of technology including; tablets, laptops, VR headsets, Beebots and interactive whiteboards

Implementation (continued)

Clearly sequenced lessons

Computing will follow a clearly sequenced and progressive approach towards their learning which will ensure all skills are taught and built upon throughout each year

E-safety

E-safety is an integral part of the curriculum spanning across each year and developing as the children mature and gain confidence in their online skills, each lesson will begin with a recap of the E-safety SMART rules with a dedicated unit allocated to teaching E-safety at the start of each academic year. Due to the ever-evolving status of e-safety staff are kept up-to-date with any issues or news that may arise throughout the year such as; inappropriate videos/trends, online identity, gaming, social media and cyber bullying.

Strong Vocabulary development

Throughout each year vocab is introduced to the children at the beginning of each lesson, this is then built upon throughout the year with references to previous vocabulary that may have been learnt earlier on in the year or in previous years. This allows our children to understand the context of the lessons they are being taught and can effectively use this language to describe what they know

4 C's of computing

Connect - Children will learn how technology is connected through use of shared folders and work
Code - Children will use code in as early as Y1 and continue to build and recap their skills each year
Collect - Children will use many online tools such as spreadsheets to collect information and represent it in a variety of ways.
Communicate - Children will learn how technology is used to communicate through applications such as email and blogs

Teacher CPD

Teachers will have constant access to resources and CPD files on Purple Mash that will allow them to stay up to date with the latest changes and updates to the computing curriculum due to the nature of computing changing constantly in an ever-evolving digital world.

Cross curricular links

Due to the use of technology, children will be able to use their computing skills across the curriculum, this could be in areas such as making a PowerPoint in English, a spreadsheet in Maths., or even using the internet to conduct research on a topic.

Recording Learning

Through Purple Mash, teachers will be able to access work that children have uploaded to a shared folder and for units of work that are completed on Microsoft applications a separate class folder will be created for children to upload work to

Impact - How will we know we have achieved our aims?

Children will be able to demonstrate and showcase content they have created as well as share this content and evaluate it effectively

Children will have confidence in operating digital systems and use their knowledge to program algorithms that achieve a required outcome

Children will be able to use technology to conduct research and have confidence in using technology to present information they are showcasing

Children will have a clear understanding of safety surrounding technology and will be able to demonstrate what to do should a threat arise that affects themselves or others