

Computing

Throughout the year the children will cover a variety of aspects of the computing curriculum to ensure all children:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

SMSC

We promote spiritual development:	We promote moral development:	We promote social development:	We promote cultural development:
<p>By wondering at the power of the digital age e.g. use of the internet</p> <p>By understanding the advantages and limitations of ICT.</p> <p>By using the internet as a gateway to 'big life' issues.</p> <p>By generating a sense of achievement (self-worth) through success at tasks (eg use of electronic writing)</p> <p>By developing a sense of resilience through: test, try, fail, refine, succeed – including through Coding</p>	<p>By exploring the moral issues surrounding the use of data.</p> <p>By considering the benefits and potential dangers of the internet – e.g. campaigns for charities and injustice as a force for good. Cyber bullying as a danger.</p> <p>By considering the vision of those involved in developing the web.</p> <p>By fostering an awareness of issues relating to e-safety and gaming such as age-related content, amount of screen time and an awareness of who you are communicating with whilst online.</p>	<p>By links through digital media services with other schools and communities.</p> <p>By highlighting ways to stay safe when using on line services and social media</p> <p>By being prepared to work with technology to forge new relationships.</p> <p>By discussing the impact of ICT on the ways people communicate e.g. Skype.</p> <p>By working collaboratively as team to use equipment and resources responsibly and effectively.</p>	<p>By exploring human achievements and creativity in relation to worldwide communications.</p> <p>By offering Amazing Animators as a University seminar to ensure an understanding of the changes in the use of technology over time.</p> <p>By developing a sense of awe and wonder at human ingenuity.</p> <p>By generating an awareness and understanding of the diversity of presentation and sharing of information globally</p>

Autumn 1	<p>Skills – Publisher text, font size – purpose</p> <p>select, use and combine a variety of software (including internet services) evaluating and presenting data and information</p>
Autumn 2	<p>E Safety</p> <p>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>
Spring 1	<p>Programming – Software Scratch</p> <p>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p>
Spring 2	<p>Programming Software Scratch</p> <p>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p>
Summer 1	<p>Data collection -Opinion Polsters</p> <p>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating</p>
Summer 2	<p>Presentation – Use of Powerpoint</p> <p>select, use and combine a variety of software (including internet services) evaluating and presenting data and information</p>