



Computing Long Term Overview

Statement of Intent

We believe that a high quality computing curriculum equips pupils for the modern world. Our aim is for pupils to have the creative thinking and understanding of computing to change the world. The core of computing is computer science, pupils are taught the principles of computing, how digital systems work and how to use this knowledge, through programming. Pupils will be able to create programs, systems and a range of content. We also ensure that pupils are able to express themselves and develop their ideas through information and communication technology at a level suitable for the future workplace.

Implementation:

Our computing curriculum is broken down in to 3 strands:

Digital Literacy - Pupils will learn how to use technology safely and responsibly as well as developing an understanding of the common uses for information technology beyond school.

Information Technology - Pupils will learn how to use technology to create, organise, store, manipulate and retrieve digital content using a variety of different software. Including creating programs, collecting and presenting data, and using search technologies effectively.

Computer Science - Understanding how computers and computer systems work. Pupils will learn what algorithms are and how they work. Pupils will also design, write and debug their own programs as well as developing an understanding of computer networks including the World Wide Web.

Impact

Each unit has a specific assessment aims to track the progress of our learners. Teachers use both formative and summative forms of assessment including verbal questions aimed at specific children and quizzes both verbal and written.

Year A

Nursery/Rec	Algorithms (Step by step instructions)	Word processing	Programming (Beebot)	Data handling (collecting information, grouping)	Presentation (Chatterpix, Seesaw)	Animation (Chatterpix)
Online safety Digital literacy	Self-image and identity Online relationships	Online reputation Online bullying	Managing online information	Health, wellbeing and lifestyle	Privacy and security	Copyright and ownership
Year 1/2	Technology around us - Algorithm (Step by step instructions) Video - Create a video clip	Digital painting Google Earth - Augmented reality	Animation (Chatterpix) Film a video	Data Handling (Grouping data)	Word processing (MS word)	Programming (Scratch Jr)
Online safety Digital literacy	Self-image and identity Online relationships	Online reputation Online bullying	Managing online information	Health, wellbeing and lifestyle	Privacy and security	Copyright and ownership

Year 3/4	Networks	Animation (flip book)	Sound - Sequence in music (Scratch)	Data Handling Branching databases Link to classification in science	Word processing Desktop publishing (design a booklet on the Ipad)	Programming - Events and actions Scratch
Online safety Digital literacy	Self-image and identity Online relationships	Online reputation Online bullying	Managing online information	Health, wellbeing and lifestyle	Privacy and security	Copyright and ownership
Year 5/6	Word processing Presentations (PPT) Create a PowerPoint linked to WW1 Networks	Video editing	Programming - Micro bit	Data Handling Flat-file databases (table of information, Excel)		Animation using Scratch Create a short animation linked to our summer term performance
Digital literacy Online safety	Self-image and identity Online relationships	Online reputation Online bullying	Managing online information	Health, wellbeing and lifestyle	Privacy and security	Copyright and ownership

..... - Computer science

Year B

Nursery/Rec	Video	Photography	Digital art	Augmented reality -Twinkl Augmented reality models	Sound	Programming - Beebot
Online safety Digital literacy	Self-image and identity Online relationships	Online reputation Online bullying	Managing online information	Health, wellbeing and lifestyle	Privacy and security	Copyright and ownership
Year 1/2	Computational thinking Algorithms (step by step instructions)	Digital photography	Programming - Robot programming (Bee bot/Botley)	Data Handling	Sound (Making music, Music lab, apple garage)	Presentation (PPT, web page)
Online safety Digital literacy	Self-image and identity Online relationships	Online reputation Online bullying	Managing online information	Health, wellbeing and lifestyle	Privacy and security	Copyright and ownership
Year 3/4	Algorithms - Step by step instructions	Programming - Micro bit	Augmented reality – Twinkl AR models Repetition in shapes (drawing shapes) FMSLogo	Video creation Data logging – link to collecting data in science	Photography Photo editing	Programming - Repetition in games (Scratch)
Online safety Digital literacy	Self-image and identity Online relationships	Online reputation Online bullying	Managing online information	Health, wellbeing and lifestyle	Privacy and security	Copyright and ownership
Year 5/6	Algorithms – Step by step instructions	Web page creation	Programming - Variables in games	Data Handling (Introduction to spreadsheets)	Digital art 3D modelling	Programming - MS make code – design a

	Sound – create a song		(Scratch)	(MS Excel)	(Tinker cad) – link to DT design	programme for the Micro bit
Online safety Digital literacy	Self-image and identity Online relationships	Online reputation Online bullying	Managing online information	Health, wellbeing and lifestyle	Privacy and security	Copyright and ownership

Our online safety sessions are delivered using the National Online College online safety plans for each year group.

Wherever possible our Computing curriculum is delivered via cross curricular activities.