



Tackley CE Primary School Computing Curriculum Overview

Skills across Key Stages

	3 & 4 year olds will be learning to:	Children in Reception will be learning to:	Early Learning Goal
Personal, Social and Emotional Development	Remember rules without needing an adult to remind them	Show resilience and perseverance in the face of a challenge Know and talk about the different factors that support their overall health and well-being, linking to 'screen time'	Managing Self Be confident to try new activities and show independence, resilience and perseverance in the face of a challenge Explain the reasons for rules, know right from wrong and try to behave accordingly
Physical Development	Match their physical skills to tasks and activities in the setting	Develop their fine motor skills so that they can use a range of tools competently, safely and confidently	
Understanding the World	Explore how things work	Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Combine different movements with ease and fluency.	Creating with materials Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function
Expressive Arts and Design		Explore, use and refine a variety of artistic effects to express their ideas and feelings	Creating with materials Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function

Key stage 1

Pupils should be taught to:

- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies

Key stage 2

Pupils should be taught to:

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- 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 and presenting data and information.
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Curriculum unit by term

Cycle A	Autumn term	Spring term	Summer term
Year 1 Year 2	Computing systems and networks – Technology around us Creating media – digital painting	Creating media – digital writing Data and information – grouping data	Programming A - Moving a robot Programming B – Introduction to animation
Year 3 Year 4	Computing systems and networks – Connecting Computers Creating media - animation	Creating media – desktop publishing Data and information – branching databases	Programming A – Sequence in music Programming B – Events and actions
Year 5 Year 6	Computing systems and networks – Sharing information Communication and collaboration Creating media – 3d modelling	Creating media – Video editing Data and information – Flat-file databases	Programming A – Selection in physical computing Programming B – Selection in quizzes

Cycle B	Autumn term	Spring term	Summer term
Year 1 Year 2	Computing systems and networks – IT around us Creating media – Digital photography	Creating media – Making music Data and information - Pictograms	Programming A – Robot algorithms Programming B – An introduction to quizzes
Year 3 Year 4	Computing systems and networks – The Internet Creating media – Audio editing	Creating media – Photo editing Data and information – Data logging	Programming A – Repetition in shapes Programming B – Repetition in games
Year 5 Year 6	Computing systems and networks – Creating media – Vector drawing	Creating media – Webpage creation Data and information - Spreadsheets	Programming A – Variables in games Programming B - Sensing