Tudor Grange Primary Academy Yew Tree

Computing Curriculum Map



EYFS

	0-3 Preschool	3-4 EYFS 1	Reception EYFS 2	Links to KS1 Curriculum				
EYFS area of Learning	Understanding the World							
Fundamental Knowledge	Seeks to acquire basic skills in turning on and operating some ICT equipment. Operates mechanical toys, e.g., turns the knob on a wind-up toy or pulls back on a friction car.	Investigate a simple program on a computer. Use ICT hardware to interact with ageappropriate computer software.	Use a simple program on a device for a purpose Recognise and select technology for a particular purpose	Create and debug simple programs using logical reasoning to predict the behaviour of simple programs. Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Use technology safely and respectively, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technology				
Early Learning Goal	There are no early learning goals that dire and use it within their provision	L ctly relate to computing objectives, though	it is still expected that children will be	I introduced to appropriate technology				

	Autumn 1 (1.1)	Autumn 2 (1.2)	Spring 1 (1.3)	Spring 2 (1.4)	Summer 1 (1.5)	Summer 2 (1.6)
Year 1	Computing systems and Networks	Creating Media	Programming	Data and Information	Creating Media	Programming
Fundamental Knowledge	Technology around us Recognising technology in school and using it responsibly.	Digital painting Choosing appropriate tools in a program to create art and making comparisons with working non-digitally.	Moving a robot Writing short algorithms and programs for floor robots, and predicting program outcomes	Grouping data Exploring object labels, then using them to sort and group objects by properties.	Digital writing Using a computer to create and format text, before comparing to writing non-digitally	Programming animations Designing and programming the movement of a character on screen to tell stories.
Year 2	Autumn 1 (2.1) Computing systems and Networks	Autumn 2 (2.2) Creating Media	Spring 1 (2.3) Programming	Spring 2 (2.4) Data and Information	Summer 1 (2.5) Creating Media	Summer 2 (2.6) Programming
Fundamental Knowledge	Information technology around us Identifying IT and how its responsible use improves our world in school and beyond	Digital photography Capturing and changing digital photographs for different purposes	Robot algorithms Creating and debugging programs, and using logical reasoning to make predictions	Pictograms Collecting data in tally charts and using attributes to organise and present data on a computer.	Digital music Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.	Programming quizzes Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.
Year 3	Autumn 1 (3.1) Computing systems and Networks	Autumn 2 (3.2) Creating Media	Spring 1 (3.3) Programming	Spring 2 (3.4) Data and Information	Summer 1 (3.5) Creating Media	Summer 2 (3.6) Programming
Fundamental Knowledge	Connecting computers Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks.	Stop-frame animation Capturing and editing digital still images to produce a stop-frame animation that tells a story	Sequencing sounds Creating sequences in a block-based programming language to make music	Branching databases Building and using branching databases to group objects using yes/no questions.	Desktop publishing Creating documents by modifying text, images, and page layouts for a specified purpose.	Events and actions in programs Writing algorithms and programs that use a range of events to trigger sequences of actions.

	Autumn 1 (4.1)	Autumn 2 (4.2)	Spring 1 (4.3)	Spring 2 (4.4)	Summer 1 (4.5)	Summer 2 (4.6)
Year 4	Computing systems and Networks	Creating Media	Programming	Data and Information	Creating Media	Programming
Fundamental Knowledge	The internet Recognising the internet as a network of networks including the WWW, and why we should evaluate online content.	Audio production Capturing and editing audio to produce a podcast, ensuring that copyright is considered.	Repetition in shapes Using a text-based programming language to explore count-controlled loops when drawing shapes.	Data logging Recognising how and why data is collected over time, before using data loggers to carry out an investigation.	Photo editing Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled.	Repetition in games Using a block-based programming language to explore count-controlled and infinite loops when creating a game
	Autumn 1 (5.1)	Autumn 2 (5.2)	Spring 1 (5.3)	Spring 2 (5.4)	Summer 1 (5.5)	Summer 2 (5.6)
Year 5	Computing systems and Networks	Creating Media	Programming	Data and Information	Creating Media	Programming
Fundamental Knowledge	Systems and searching Recognising IT systems in the world and how some can enable searching on the internet.	Video production Planning, capturing, and editing video to produce a short film	Selection in physical computing Exploring conditions and selection using a programmable microcontroller.	Flat-file databases Using a database to order data and create charts to answer questions	Introduction to vector graphics Creating images in a drawing program by using layers and groups of objects.	Selection in quizzes Exploring selection in programming to design and code an interactive quiz.
	Autumn 1 (6.1)	Autumn 2 (6.2)	Spring 1 (6.3)	Spring 2 (6.4)	Summer 1 (6.5)	Summer 2 (6.6)
Year 6	Computing systems and Networks	Creating Media	Programming	Data and Information	Creating Media	Programming
Fundamental Knowledge	Communication and collaboration Exploring how data is transferred by working collaboratively online.	Webpage creation Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation.	Variables in games Exploring variables when designing and coding a game.	Introduction to spreadsheets Answering questions by using spreadsheets to organise and calculate data.	3D modelling Planning, developing, and evaluating 3D computer models of physical objects.	Sensing movement Designing and coding a project that captures inputs from a physical device.