Curriculum overview for parents and carers

Computing

Summary of key computing learning for Year 1 to Year 6.

Computing curriculum overview for parents and carers (Key stage 1)

Year 1			
Autumn 1	Computing systems and networks - Technology around us Recognising technology in school and using it responsibly.	Autumn 2	Creating media - Digital painting Choosing appropriate tools in a program to create art, and making comparisons with working nondigitally.
Spring 1	Programming - Moving a robot Writing short algorithms and programs for floor robots, and predicting program outcomes.	Spring 2	Data and information - Grouping data Exploring object labels, then using them to sort and group objects by properties.
Summer 1	Creating media - Digital writing Using a computer to create and format text, before comparing to writing non-digitally.	Summer 2	Programming - Programming animations Designing and programming the movement of a character on screen to tell stories.

Computing curriculum overview for parents and carers (Key stage 1)

Year 2			
Autumn 1	Computing systems and networks - Information technology around us Identifying IT and how its responsible use improves our world in school and beyond.	Autumn 2	Creating media - Digital photography Capturing and changing digital photographs for different purposes.
Spring 1	Programming - Robot algorithms Creating and debugging programs, and using logical reasoning to make predictions.	Spring 2	Data and information Pictograms Collecting data in tally charts and using attributes to organise and present data on a computer.
Summer 1	Creating media - Digital music Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.	Summer 2	Programming - Programming quizzes Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.

Computing curriculum overview for parents and carers (Lower key stage 2)

Year 3			
Autumn 1	Computing systems and networks - Connecting computers Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks	Autumn 2	Creating media Stop-frame animation Capturing and editing digital still images to produce a stop frame animation that tells a story
Spring 1	Programming Sequencing sounds Creating sequences in a block-based programming language to make music.	Spring 2	Data and information Branching databases Building and using branching databases to group objects using yes/no questions.
Summer 1	Creating media Desktop publishing Creating documents and modifying text, images and page layouts for a specific purpose.	Summer 2	Programming Events and actions in programs Writing algorithms and programs that use a range of events to trigger sequences of actions.

Computing curriculum overview for parents and carers (Lower key stage 2)

Year 4			
Autumn 1	Computing systems and networks The internet Recognising that the internet is a network of networks including the WWW, and why we should evaluate online content.	Autumn 2	Creating media Audio production Capturing and editing audio to produce a podcast, ensuring that copyright is considered.
Spring 1	Programming Repetition in shapes Using a text-based programming language to explore count-controlled loops when drawing shapes.	Spring 2	Data and information Data logging Recognising how and why data is collected over time, before using data loggers to carry out an investigation.
Summer 1	Creating media Photo editing Manipulating digital images, and reflecting on the impact of the changes and whether the required purpose is fulfilled.	Summer 2	Programming Repetition in games Using a block-based programming language to explore count-controlled and infinite loops when creating a game.

Computing curriculum overview for parents and carers (Upper key stage 2)

Year 5			
Autumn 1	Computing systems and networks Systems and searching Recognising IT systems in the world and how some can enable searching on the internet.	Autumn 2	Creating media Video production Planning, capturing, and editing video to produce a short film.
Spring 1	Programming Selection in physical computing Exploring conditions and selection using a programmable microcontroller.	Spring 2	Data and information Flat-file databases Using a database to order data and create charts to answer questions.
Summer 1	Creating media Introduction to vector graphics Creating images in a drawing program by using layers and groups of objects.	Summer 2	Programming Selection in quizzes Exploring selection in programming to design and code an interactive quiz.

Computing curriculum overview for parents and carers (Upper key stage 2)

Year 6			
Autumn 1	Computing systems and networks Communication and collaboration Exploring how data is transferred by working collaboratively online.	Autumn 2	Creating media Webpage creation Designing and creating webpages, giving consideration to copyright, aesthetics and navigation.
Spring 1	Programming Variables in games Exploring variables when designing and coding a game.	Spring 2	Data and information Introduction to spreadsheets Answering questions by using spreadsheets to organise and calculate data.
Summer 1	Creating media 3D modelling Planning, developing, and evaluation 3D computer models of physical objects.	Summer 2	Programming Sensing movement Designing and coding a project that captures inputs from physical devices.