Units for curriculum planning

Key Stage 1

Cycle A

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing systems and networks		Creating Media (Art links)		Data and information (Maths – statistics links)	
Technology around us 1.1 Recognising technology in school and using it responsibly	Information technology around us 2.1 Identifying IT and how its responsible use improves our world in school and beyond	Digital Painting 1.2 Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally	Digital photography 2.2 Digital photography Capturing and changing digital photographs for different purposes.	Grouping data 1.4 Exploring object labels, then using them to sort and group objects by properties	Pictograms 2.4 Collecting data in tally charts and using attributes to organise and present data on a computer

E- Safety

*Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies

*Use technology safely and keep personal information private

Key Stage 1

Cycle B

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Creating Media (Writing link, Music Link)		Programming A		Programming B	
Digital Writing 1.5 Using a computer to create and format text, before comparing to writing non-digitally	Making Music 2.5 Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.	Moving a robot 1.3 Writing short algorithms and programs for floor robots, and predicting program outcomes.	Robot algorithms 2.3 Creating and debugging programs, and using logical reasoning to make predictions.	Programming animations 1.6 Designing and programming the movement of a character on screen to tell stories.	Programming quizzes 2.6 Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz
E- Safety *Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies *Use technology safely and keep personal information private					

Lower Key Stage 2

Cycle A

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2

Computing systems and networks		Creating Media		Data and information	
Connecting computers 3.1 Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks.	The internet 4.1 Recognising the internet as a network of networks including the WWW, and why we should evaluate online content.	Stop-frame animation 3.2 Capturing and editing digital still images to produce a stop-frame animation that tells a story	Audio editing 4.2 Capturing and editing audio to produce a podcast, ensuring that copyright is considered.	Branching databases 3.4 Building and using branching databases to group objects using yes/no questions.	Data logging 4.4 Recognising how and why data is collected over time, before using data loggers to carry out an investigation.

E-Safety
*Use technology safely and respectfully, keeping personal information private
*Use technology safely and recognise acceptable and unacceptable behaviour
*Use technology responsibly and understand that communication online may be seen by others *Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies

Lower Key Stage 2

Cycle B

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Creating Media		Programming A1 and B1		Programming A2 and B 2	

Desktop publishing 3.5	Photo editing 3.6	Sequencing sounds 3.3	Events and actions in programs 3.6	Repetition in shapes 4.3	Repetition in games 4.6
Creating documents by modifying text, images, and page layouts for a specified purpose.	Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled PSHE link- self-image	Creating sequences in a block-based programming language to make music.	Writing algorithms and programs that use a range of events to trigger sequences of actions	Using a text-based programming language to explore count-controlled loops when drawing shapes..	Using a block-based programming language to explore count-controlled and infinite loops when creating a game

<u>E-Safety</u>

*Use technology safely and respectfully, keeping personal information private
*Use technology safely and recognise acceptable and unacceptable behaviour
*Use technology responsibly and understand that communication online may be seen by others *Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies

<u>Upper Key Stage 2</u>

Cycle A

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing systems and networks		Creating Media		Data and information	

Sharing information 5.1	Internet communication 6.2	Video editing 5.2	Webpage creation 6.2	Flat-file databases 5.4	Introduction to spreadsheets 6.4
Identifying and exploring how information is shared between digital systems.	Recognising how the WWW can be used to communicate and be searched to find information.	Planning, capturing, and editing video to produce a short film	Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation.	Using a database to order data and create charts to answer questions.	Answering questions by using spreadsheets to organise and calculate data.

E-Safety

*Understand the need to only select age-appropriate content
*Use technology respectfully and responsibly
*Identify a range of ways to report concerns about content and contact in and out of school

Upper Key Stage 2

Cycle B

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Creating Media *Art link, DT link*		Programming A1 and B1		Programming A2 and B2	

Vector drawing 5.5	3D modelling 6.5	Selection in physical computing 5.3	Selection in quizzes 5.6	Variables in games 6.3	Sensing 6.6
Creating images in a drawing program by using layers and groups of objects	Planning, developing, and evaluating 3D computer models of physical objects.	Exploring conditions and selection using a programmable microcontroller	Exploring selection in programming to design and code an interactive quiz.	Exploring variables when designing and coding a game	Designing and coding a project that captures inputs from a physical device

E-Safety

*Understand the need to only select age-appropriate content
*Use technology respectfully and responsibly
*Identify a range of ways to report concerns about content and contact in and out of school