Unit Area	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Digital literacy – Online Safety	**Keeping safe and exploring technology.** Help children stay safe and understand what a healthy use of technology is. Then explore the tech in our homes and businesses and get hands on with control equipment to figure out how it all works.	**Keep safe and create.** A combination of 3 lessons from Common Sense Education's excellent digital citizenship curriculum and the chance for your students to apply their learning to digital making activities that would help them share the important online safety messages with others.	**Digital literacy and online safety (Y3).** Six lessons taken from Common Sense Education's excellent digital citizenship curriculum, covering a wide range of topics including well-being, privacy and security, online identity, relationships, communication and the media.	**Digital literacy and online safety (Y4).** Six lessons taken from Common Sense Education's excellent digital citizenship curriculum, covering a wide range of topics including well-being, privacy and security, online identity, relationships, communication and the media.	**Digital literacy and online safety (Y5).** Six lessons taken from Common Sense Education's excellent digital citizenship curriculum, covering a wide range of topics including well-being, privacy and security, online identity, relationships, communication and the media.	**Digital literacy and online safety (Y6).** Six lessons taken from Common Sense Education's excellent digital citizenship curriculum, covering a wide range of topics including well-being, privacy and security, online identity, relationships, communication and the media.
Digital literacy - Multimedia	**Exploring digital sound.** Introduce children to digital sound, and let them experiment with simple beats, tempo and composition with various tools. **Making multimedia stories.** Get children writing and creating digital stories, and then bring them to life with sound and animation. **An introduction to digital art.** Introduce children to a range of digital art packages and the tools within them. They apply the tools and their skills to a range of artistic styles and genres from painting to photography.	**Writing in different styles.** Introduce children to word processing and desktop publishing using a number of different tools and design tasks. **An introduction to animation.** Get really creative as you introduce both 2D and stop frame animation. Students will love creating their own animated clips and stories with a variety of tools.	**Digital imagery – patterns in nature.** Take a look at the beauty of repeating patterns in nature and different methods of recreating these with digital art tools and photo editing.	**3D design.** Introduce 3D modelling and design and take a look at how these skills are used in the real world in a huge variety of different careers. Learn the basics of 3D modelling software Sketchup, and then put your design skills to the test with a variety of projects, including designing furniture and buildings.	**Building collaborative websites.** Use Google apps for collaborative research as well as planning and creation of a group website, considering the design and consistency of the site. **Manipulating sound.** Explore a range of web tools for sound and music creation and then learn about sound editing; creating radio adverts and audio books, complete with sound effects and atmospheric music.	**Creating instructional videos.** Plan, design and create instructional teaching videos. Perfect for reinforcing other areas of the curriculum. Students can create videos to support each other with revision and then share them online to give access to everyone in the class. **Manipulating images.** Investigate a range of different artistic styles and how they can be recreated using digital art tools. Digital sculpture is also looked at and combined with photo editing.
Computer Science	**Action algorithms.** Apply the concept of algorithms and instructions to a variety of contexts, both digital and analogue (e.g. operating a crane, recipes and dance routines) **Programming direction.** A programming unit that focuses on directional instructions and creating sequences (algorithms) using a variety of programs and equipment.	**Programming with Scratch Jr.** Introduce students to this great block-based programming language to create animations and games perfect for KS1. Write and debug algorithms, learn about repeating, and different triggers to create actions. **Programming with Logo.** Introduce the written programming language of Logo. Students program their on-screen robot to move and create drawings using repeat commands and their own procedures.	**Starting from Scratch.** Lay strong foundations for coding as you introduce your class to the visual language of Scratch, while using the PRIMM approach. Teach your students to predict, run and investigate code, before they start to modify existing code and eventually plan and make their own coded animation project. **Getting started with Kodu.** Introduce students to creating games with Kodu. Program your characters and design 3D worlds to make exciting collecting and racing games.	**Scratch maze games.** Teach algorithms, repetition, conditions and variables, while introducing students to Scratch's block-based coding language. Build adventure maze games and design your own levels, characters and objects to collect. **Kodu - an independent project.** Give your class the opportunity to unleash their full creative and coding potential with this independent Kodu project. Students will work independently to plan, design, test and evaluate their own Kodu game, using a resource bank of ideas to support them.	**Building retro games – pick a project.** Choose from 3 classic video game projects with this fantastic coding unit. Analyse the original games, build a simple version of them, then let the students get creative and independently extend their projects. **Lego robotics.** Introduce students to programming LEGO Robots. Control their movement with precise calculations and coding, then utilise the robot's sensors to interact with its environment and solve problems.	**Getting started with the BBC Micro:bit.** Introduce students to physical computing with a BBC micro:bit. Control the LED matrix and find out how screens work, learn about inputs and outputs, turn your micro:bit into a scoring or game device while learning about variables, conditionals and iteration.

				Computational thinking – alien contact. An unplugged unit to develop your students into strong computational thinkers by solving a wide range of exciting unplugged problems. Will they be able to solve the problems, earn the trust of an alien species and cement a new galactic friendship?!		
Information Technology	N/A	**Finding and presenting information.** Introduces children to web browsers to explore and search websites safely, collecting and presenting information in graphs, and different ways of sorting and classifying data with databases.	**Communication and collaboration.** Introduce students to email and a range of online collaborative tools. Learn how to safely and appropriately make use of these essential digital tools. Lessons are provided to cover Google G-Suite for Education and Microsoft Office 365 **Databases.** Explore different ways to collect, interrogate and present data collaboratively using a range of programs. What is a database? Why and how are they used in real life?	**Searching the web.** Take a detailed look at all elements of searching the web with care and consideration, covering: searching tricks, validating websites, improving your searches, searching images and searching online maps.	**What is a computer?** Delve into what really makes a computer a computer. Is a TV a computer? Is a fridge a computer? Is a toilet a computer?! It also investigates just what is inside that metal box, how a computer works, memory, data and binary code. By the end you'll know your RAM from your ROM and your CPU from your GPU.	**Spreadsheet masters.** Hone your spreadsheet skills to become a spreadsheet master! Learn about the basics of spreadsheets with a range of fun tasks. Investigate sorting, using formulas and conditional formatting as you build towards making self-marking quiz games for your classmates. **Inside the internet.** Get under the skin of the Internet to investigate how the web works, how it's built and written with HTML code. Then learn how to create your own web pages written in HTML and CSS.