YEAR 3 3.1 - Composing Email

Computing Area	Information Communication Technology
National Curriculum Strands	 To 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 To 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
Skills Progression Points	 Understand the difference between data and information. Be able to effectively use a spell checker. Children consider their responsibilities and actions to others online. Understand how to use a search engine responsibly and safely. Save and retrieve work online, on the school network and their own device.
Hardware	Laptops/Desktop PC/iPads
Software/App	Teacher access to an email account (you could use an existing account or set up a new one if preferred - the pupils do not need access to it but will view on IWB) Microsoft Word or Google Docs <u>https://cybergamesuk.com/</u> (Cyberland Flower Shop) <u>https://beinternetawesome.withgoogle.com/en_us/interland</u> <u>https://www.childnet.com/resources/the-adventures-of-kara-winston-and-the-smart-crew</u>
Unit Objective	To know what emails are, their different uses and how to create them.
Unit Vocabulary	Email, Malicious, Phishing, Social media, Networks, Internet, World wide web, Webcam, Keyboard

YEAR 3 3.2 - Introduction to Scratch

Computing Area	Coding and Programming
National Curriculum Strands	 Design, write and debug programs that accomplish specific goals; solve problems by decomposing them into smaller parts Use sequence in programs; work with variables and various forms of input and output. Use logical reasoning to detect and correct errors in algorithms and programs Select, use and combine a variety of software to design and create content that accomplish(es) given goals, including presenting information
Skills Progression Points	 Understand how an algorithm is implemented using a sequence of precise instructions. Can predict the outcome of a sequence of precise instructions. Repeatedly test a program and recognise when they need to debug it. Detect a problem in an algorithm, which could result in a different outcome to the one intended. Understand what inputs and outputs are, how they can be used. Provide examples of how to use inputs and outputs effectively. Designs, writes, executes and debugs programs of increasing complexity that accomplish a specific goal. Use logical reasoning to predict and debug more complex programs including inputs and outputs.
Hardware	Laptops/Desktop PC /iPads (PCs / Laptops work best)
Software/App	Scratch 3.0 online
Unit Objective	To program sprites using a range of blocks to add animation, sound and other effects
Unit Vocabulary	Sprite, Program, Code, Blocks, Costume, Animation, Co-ordinates, Move, Turn

YEAR 3 3.3 - Prediction & Debugging

Computing Area	Computer Science
National Curriculum Strands	 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
Skills Progression Points	 Understand how an algorithm is implemented using a sequence of precise instructions. Can predict the outcome of a sequence of precise instructions. Repeatedly test a program and recognise when they need to debug it. Detect a problem in an algorithm, which could result in a different outcome to the one intended. Designs, writes, executes and debugs programs of increasing complexity that accomplish a specific goal. Use logical reasoning to predict and debug more complex programs.
Hardware	Laptops/Desktop PC/ iPads
Software/App	Scratch, Micro: bit, RapidRouter, Code.org
Unit Objective	To predict and test the outcome of written programs. To test and debug written programs.
Unit Vocabulary	Computational Thinking, Algorithm, Programming, Sequence, Debugging, Sprite, Prediction, Decomposition, Input, Output.

YEAR 3 3.4 - Altering Media

Computing Area	Information Technology
National Curriculum Strands	 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 content or contact on the Internet or other online technologies
Skills Progression Points	 Children consider that all of the media they see could have been altered. Save and retrieve work online, on the school network and their own device. Think about whether they can use images that they find online in their own work.
Hardware	Laptops/Desktop PC/ iPads
Software/App	Flickr, Pixabay, Be Funky, Photos (IOS), Photobooth (iOS), Pic Collage
Unit Objective	To look at the skills behind taking a good photograph and how these photos can be edited in various ways.
Unit Vocabulary	Camera, image, filter, crop, pixel, portfolio, theme, consent.

YEAR 3 3.5 - Inside a Computer

Computing Area	Computer Science
National Curriculum Strands	• To 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
Skills Progression Points	 To identify components within a PC/Laptop and what each component does. To understand the basic fundamentals of how a computer works.
Hardware	Laptops/Desktop PC/ iPads
Software/App	Web browser (Google, Safari, Edge or Firefox)
Unit Objective	To identify the different parts of a computer. To understand how computers have evolved over the last 100 years.
Unit Vocabulary	Laptop, desktops, hard drive, fan, heat sink, keyboard, motherboard, microprocessor, memory, disc drive, network, router, hub, switch, Wi-Fi.

$YEAR 3 \ {\rm 3.6-Publishing\ Content\ Online}$

Computing Area	Design - Information Communication Technology
National Curriculum Strands	• To 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
Skills Progression Points	 Combine a mixture of text, graphics and sound to share ideas and learning. Use appropriate keyboard commands to amend text. Be able to effectively use a spell checker. Evaluate their work and improve its effectiveness. Use an appropriate tool to share their work online.
Hardware	Laptops/Desktop PC/ iPads
Software/App	Internet/ Canva
Unit Objective	Children will be introduced to graphic design, marketing, developing their publishing skills.
Unit Vocabulary	Social media, Graphic design, Publishing, Username, Password, Marketing, Template, Elements, Text, Effect, Filter, Adjust, Crop.