KS2 - Computing

Unit theme	Year 3					
	Computing systems and networks	**Creating Media**	**Programming A**	**Data and information**	**Creating media**	**Programming B**
Unit title	Connecting Computers (3.1)	Stop-frame animation (3.2)	Sequencing Sounds (3.3)	Branching Databases (3.4)	Desktop Publishing (3.5)	Events and actions in Programs (3.6)
I know that/how to...	-To identify input and output devices -To recognise how digital devices can change the way we work -To explain how a computer network can be used to share information -To explore how digital devices can be connected -To recognise the physical components of a network	-To explain that animation is a sequence of drawings or photographs -To relate animated movement with a sequence of images -To plan an animation -To identify the need to work consistently and carefully -To review and improve an animation -To evaluate the impact of adding other media to an animation	-To explore a new programming environment -To identify that commands have an outcome -To explain that a program has a start -To recognise that a sequence of commands can have an order -To change the appearance of my project -To create a project from a task description	-To create questions with yes/no answers -To identify the attributes needed to collect data about an object -To create a branching database -To explain why it is helpful for a database to be well structured -To plan the structure of a branching database -To independently create an identification tool	-To recognise how text and images convey information -To recognise that text and layout can be edited -To choose appropriate page settings -To add content to a desktop publishing publication -To consider how different layouts can suit different purposes -To consider the benefits of desktop publishing	-To explain how a sprite moves in an existing project -To create a program to move a sprite in four directions -To adapt a program to a new context -To develop my program by adding features -To identify and fix bugs in a program -To design and create a maze-based challenge
Vocabulary introduced/ embedded	Digital device, input, process, output Program, Digital, Non–Digital Connection, network, network switch Server, wireless access point Network cables, network sockets	Animation, flip book, stop frame animation, frame, image, sequence, photograph, Setting, character, events, onion skinning Consistency, Evaluation, delete, frame Media, import, transition	Scratch, programming, blocks, commands, code, sprite, costume, stage, backdrop Sprites, programming blocks, motion, turn, point in direction, go to, glide Sequence, event, task, design, code, run the code Sequence, order, note, chord Sprite, stage, costume, backdrop Design, algorithm, bug, debug	Attribute, value, questions, table, objects Branching database, database, attribute, value, questions, objects, equal, even, separate Branching database, database, attribute, value, questions, objects Branching database, attribute, questions, structure, compare, order, organise Branching database, attribute, value, question, selecting Branching database, attribute, value, questions, information, decision tree	Text, images, advantages, disadvantages, communicate Font, font style, communicate, template Landscape, portrait, orientation, placeholder, template, layout, content Desktop publishing, copy, paste Layout, purpose Desktop publishing, benefits	Motion, event, sprite, algorithm, logic Move, resize, algorithm Extension block, pen up, set up Pen, design, event, action, algorithm Debugging, errors, setup Design, code, setup, test, debug, actions, events

KS2 - E-Safety

Year 3

Unit theme	Self-image & identity	Online Relationships	Online Reputation	Online Bullying	Managing Online Information	Health, Wellbeing and lifestyle	Privacy and security	Copyright and ownership
I know that/how to...	I can explain what is meant by the term 'identity'. I can explain how people can represent themselves in different ways online. I can explain ways in which someone might change their identity depending on what they are doing online (e.g. gaming, using an avatar, social media) and why.	I can describe ways people who have similar likes and interests can get together online. I can explain what it means to 'know someone' online and why this might be different from knowing someone offline. I can explain what is meant by 'trusting someone online', why this is different from 'liking someone online', and why it is important to be careful about who to trust online, including what information and content they are trusted with. I can explain why someone may change their mind about trusting anyone with something if they feel nervous, uncomfortable or worried. I can explain how someone's feelings can be hurt by what is said or written online. I can explain the importance of giving and gaining permission before sharing things online and how the principles of sharing online are the same as sharing offline (e.g. sharing images and videos).	I can explain how to search for information about others online. I can give examples of what anyone may or may not be willing to share about themselves online. I can explain the need to be careful before sharing anything personal. I can explain who someone can ask if they are unsure about putting something online.	I can describe appropriate ways to behave towards other people online and why this is important. I can give examples of how bullying behaviour could appear online and how someone can get support.	I can demonstrate how to use key phrases in search engines to gather accurate information online. I can explain what autocomplete is and how to choose the best suggestion. I can explain how the internet can be used to sell and buy things. I can explain the difference between a belief, an opinion and a fact and can give examples of how and where they might be shared online (e.g. in videos, memes, posts, news stories). I can explain that not all opinions shared may be accepted as true or fair by others (e.g. monsters under the bed). I can describe and demonstrate how we can get help from a trusted adult if we see content that makes us feel sad, uncomfortable worried or frightened.	I can explain why spending too much time using technology can sometimes have a negative impact on anyone (e.g. mood, sleep, body, relationships). I can give some examples of both positive and negative activities where it is easy to spend a lot of time engaged (e.g. doing homework, games, films, videos). I can explain why some online activities have age restrictions, why it is important to follow them and know who I can talk to if others pressure me to watch or do something online that makes me feel uncomfortable (e.g. age restricted gaming or websites).	I can describe simple strategies for creating and keeping passwords private. I can give reasons why someone should only share information with people they choose and can trust. I can explain that if they are not sure or feel pressured, they should tell a trusted adult. I can describe how connected devices can collect and share anyone's information with others.	I can explain why copying someone else's work from the internet without permission isn't fair and can explain what problems this might cause.
Vocabulary	Identity, online, avatar, reputation, username, online reputation,	Sharing, trusted adult, online, trust, respect, consent, permission	Search, incorrect, inaccurate, official, information, information, online, share, profile, username, trusted adult, discussion, response, online	Response, power, responsibility, positive, negative, Cyberbullying, follower, add, block, report, support, safety, happy	Autocomplete, suggestion, prediction, fact, opinion, belief, source, share, opinion, fair	Happy, healthy, trusted adult, age restriction, PEGI, ability, violence,	Safe, wifi, devices, information, passwords, trustworthy, private, adverts, connected, collect, share, information, targeted	Copyright, breach, copy, save, document, digital artwork,