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| Computer Science |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Instructions | * Know that an algorithm is a series of instructions
* Combine commands to follow a route
* Use the term ‘debugging’ to correct mistakes across the curriculum
* Move a programmable toy (Beebot) in different directions, by giving and following instructions
 | * Describe and write algorithms to complete specific tasks
* Plan out and enter a sequence of commands to carry out a specific task (Beebots and Scratch Junior)
* Control motion by specifying the number of steps to travel, direction and turn
 | * Refine a program using the repeat command (Lightbot)
* Create a procedure to perform a specific tasks e.g. drawing a shape (Scratch)
 | * Recognise that using algorithms will also help to solve problems in other areas of learning e.g. Maths/Science/D&T
* Write a program for a specific purpose, incorporating features such as inputs
* Recognise an error in a program and debug it
 | * Plan and test my algorithms and programs, detecting and correcting errors as needed.
* Evaluate and improve programming
* Use ‘If’ and ‘then’ commands to determine an action
* Use logical reasoning to detect and debug mistakes in a program
 | * Explain and program each of the steps in an algorithm
* Evaluate the effectiveness and efficiency of an algorithm.
* Use different inputs (including sensors) to control a device or onscreen action and predict what will happen
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| Digital Literacy |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| * Identify ways that information can be put on the internet.
* Talk about how to find things out on the internet
* Identify devices used to access information on the internet and give simple examples of how to find information (e.g. search engine, voice activated searching).
 | * Find out facts by navigating websites
* Use a search engine to find suitable websites using key words.
* Know that not all information online is accurate or useful
 | * Demonstrate how to navigate a simple webpage to get to information (e.g. home, forward, back buttons; links, tabs and sections).Explain what voice activated searching is and how it might be used(e.g. Alexa, Google Now, Siri). Explain the difference between things that are imaginary or things that are real.Explain why some information online may not be true.
 | * Save and retrieve work on the internet and school network
* Describe the World Wide Web as part of the ‘Internet’ that contains websites
* Use search tools to find and use appropriate images
* Type in a URL to find a website
* Consider copyright of online images
* Begin to understand that some websites are more reliable than others
 | * Know that some website are more reliable than others
* Identify key words to use when searching safely on the World Wide Web
 | * Use different online communication tools for different purposes e.g. comments/emails/blogs
* Recognise and evaluate different types of information that I find on the World Wide Web
 | * Use a search engine to find appropriate information and check its reliability Add and format content to a web page
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| Information Technology |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|  | * Capture images from a camera
* Record an audio recording
* Create images using paint tools
* Use letters, full stop, spacebar and enter key to type words and sentences
* Change the brush size for style and effect (paint)
* Collect and record data
* Create and use pictograms
* Explain what a graph shows
 | * Use a simple database to find information
* Add title sand labels to a chart or graph to make the information more clear
* Save and retrieve files
* Insert a photograph within a document
* Begin to use touch typing skills
* Discuss the quality of my images and make decisions e.g. delete a blurred image.
* Draw shapes and fill them with colour to create a picture
* Edit and improve my work by changing, adding or removing words
 | * Use a mixture of text, graphics and sound to share ideas and learning
* Amend text using mouse pad control, backspace and spellchecker
* Use a mixture of text, graphics and sound to share ideas and learning
* Improve touch typing skills
* Evaluate and improve my work
* Organise data in different ways
* Collect data and identify where it could be inaccurate
* Choose the best way to present data to others
 | * Crop and/ rotate an image
* Adjust the colours on a photo
* Shoot frames to combine into an animation
* Confidently use touch typing skills
* Order shapes/images by sending them to the back/front
* Explain the effect my choices have on an audience
* Search a ready-made database to answer questions
* Add to a database
* Make a branching database (classification key)
 | * Choose an appropriate tool to collect data
* Use a spreadsheet and database to collect and record data
* Talk about mistakes in data and suggest how it could be checked
* Use text, photo, sound and video editing tools to refine work
* Independently touch type
 | * Design and create a spreadsheet for a specific purpose, incorporating different features of design and function.
* Undertake film making including: scripting; rehearsal; evaluation; quality of shots; appropriateness of sound; saving to different media
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| E-Safety |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| See overview of e-safety curriculum | See overview of e-safety curriculum | See overview of e-safety curriculum | See overview of e-safety curriculum | See overview of e-safety curriculum | See overview of e-safety curriculum | See overview of e-safety curriculum |