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|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| EYFS | **Screen:**-Active Inspire, e.g. children are to draw and label a picture of themselves. -Twinkl Maths Games / Counting Games. **iPads:****-**Doodle Buddy.-Bee Bot game.**Computer:**-Phonics Games. **-**Active Inspire. **Bee Bots:**-Children are to direct the Bee Bots along the path to Granny’s House. | **Screen:**-Active Inspire, e.g. children are to design their own Christmas Tree. -Twinkl Maths Games / Super Pairs 2D Shape Games.**iPads:****-**Doodle Buddy.-Bee Bot game.**Computer:**-Phonics Games. **-**Active Inspire. **Bee Bots:**-Children are to direct the Bee Bots through the story of Stick Man. Can they order the events and go to them correctly?Enrichment: E-Safety Audit | **Screen:**-Active Inspire, e.g. children are to draw a Gruffalo Scene and label it. Can they write a caption? -Twinkl Maths Games / Number Bonds to 5 matching game. **iPads:****-**Doodle Buddy.-Bee Bot game.**Computer:**-Phonics Games. **-**Active Inspire. **Bee Bots:**-Children are to move the Doctor Bee Bots to help the different objects. Enrichment: Safer Internet Day | **Screen:**-Active Inspire, e.g. children are to design their own pancake and label the toppings. -Twinkl Maths Games / Number Bonds to 10 matching game. **iPads:****-**Doodle Buddy.-Bee Bot game.**Computer:**-Phonics Games. **-**Active Inspire. **Bee Bots:**-Children are to programme the Bee Bots to visit the different planets.  | **Screen:**-Active Inspire, e.g. children are to draw a farm scene and label it. -Twinkl Maths Games / Addition Game. **iPads:****-**Doodle Buddy.-Bee Bot game.**Computer:**-Phonics Games. **-**Active Inspire. **Bee Bots:**-Children are to move the Bee Bot through the story of ‘What the Ladybird Heard’.  | **Screen:**-Active Inspire, e.g. children are to draw an under the sea setting and label it. -Twinkl Maths Games / Counting to 20 Game. **iPads:****-**Doodle Buddy.-Bee Bot game.**Computer:**-Phonics Games. **-**Active Inspire. **Bee Bots:**-Children are to programme the Bee Bot to collect the treasure dotted around the carpet.  |
| Year 1 | **Computing systems and networks – Technology around us**To identify technologyTo identify a computer and its main partsTo use a mouse in different waysTo use a keyboard to type on a computerTo use the keyboard to edit textTo create rules for using technology responsibly | **Creating media – Digital painting**To describe what different freehand tools doTo use the shape tool and the line toolsTo make careful choices when painting a digital pictureTo explain why I chose the tools I usedTo use a computer on my own to paint a pictureTo compare painting a picture on a computer and on paperEnrichment: E-Safety Audit | **Creating media – Digital writing**To use a computer to writeTo add and remove text on a computerTo identify that the look of text can be changed on a computerTo make careful choices when changing textTo explain why I used the tools that I choseTo compare typing on a computer to writing on paperEnrichment: Safer Internet Day | **Grouping data**To label objectsTo identify that objects can be countedTo describe objects in different waysTo count objects with the same propertiesTo compare groups of objectsTo answer questions about groups of objects | **Programming A**To explain what a given command will doTo act out a given wordTo combine ‘forwards’ and ‘backwards’ commands to make a sequenceTo combine four direction commands to make sequencesTo plan a simple programTo find more than one solution to a problem | **Programming B – Introduction to animation**To choose a command for a given purposeTo show that a series of commands can be joined togetherTo identify the effect of changing a valueTo explain that each sprite has its own instructionsTo design the parts of a projectTo use my algorithm to create a program |
| Year 2 | **Computing systems and networks- IT around Us*** To recognise the uses and features of information technology.
* To identify the uses of information technology in the school.
* To identify information technology beyond school.
* To explain how information technology helps us.
* To explain how to use information technology safely.
* To recognise that choices are made when using information technology.
 | **Creating media- Digital Photography** * To use a digital device to take a photograph.
* To make choices when taking a photograph.
* To describe what makes a good photograph.
* To decide how photographs can be improved.
* To use tools to change an image.
* To recognise that photos can be changed.

Enrichment: E-Safety Audit | **Creating media- Making Music*** To say how music can make us feel.
* To identify that there are patterns in music.
* To experiment with sound using a computer.
* To use a computer to create a musical pattern.
* To create music for a purpose.
* To review and refine our computer work.

Enrichment: Safer Internet Day | **Data and information- Pictograms*** To recognise that we can count and compare objects using tally charts.
* To recognise that objects can be represented as pictures.
* To create a pictogram.
* To select objects by attribute and make comparisons.
* To recognise that people can be described by attributes.
* To explain that we can present information using a computer.
 | **Programming A- Robot Algorithms** * To describe a series of instructions as a sequence.
* To explain what happens when we change the order of instructions.
* To use logical reasoning to predict the outcome of a program.
* To explain that programming projects can have code and artwork.
* To design an algorithm.
* To create and debug a program that I have written.
 | **Programming B- An Introduction to Quizzes*** To explain that a sequence of commands has a start.
* To explain that a sequence of commands has an outcome.
* To create a program using a given design.
* To change a given design.
* To create a program using my own design.
* To decide how my project can be improved.
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| Year 3 | **Computing Systems and Networks – Connecting Computers*** To explain how digital devices function
* To identify input and output devices
* To recognise how digital devices can change the way that 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
 | **Creating Media – Animation*** 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 animationEnrichment: E-Safety Audit | **Creating Media – Desktop Publishing*** 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

Enrichment: Safer Internet Day | **Data and Information – Branching Databases*** 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
 | **Programming A – Sequence in Music*** 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
 | **Programming B – Events and Actions*** 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
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| Year 4 | **The Internet*** To describe how networks physically connect to other networks
* To outline how websites can be shared via the World Wide Web (WWW)
* To describe how content can be added and accessed on the World Wide Web (WWW)
* To recognise how the content of the WWW is created by people
* To evaluate the consequences of unreliable content

Enrichment: Coding Club | **Creating media – audio production*** To identify that sound can be recorded
* To explain that audio recordings can be edited
* To recognise the different parts of creating a podcast project
* To apply audio editing skills independently
* To combine audio to enhance my podcast project
* To evaluate the effective use of audio

Enrichment: Coding ClubE-Safety Audit | **Photo Editing*** To explain that the composition of digital images can be changed
* To explain that colours can be changed in digital images
* To explain how cloning can be used in photo editing
* To explain that images can be combined
* To combine images for a purpose
* To evaluate how changes can improve an image

Enrichment: Safer Internet DayCoding Club | **Data Logging*** To explain that data gathered over time can be used to answer questions
* To use a digital device to collect data automatically
* To explain that a data logger collects ‘data points’ from sensors over time
* To recognise how a computer can help us analyse data
* To identify the data needed to answer questions
* To use data from sensors to answer questions

Enrichment: Coding Club | **Programming A - Repetition in shapes*** To identify that accuracy in programming is important
* To create a program in a text-based language
* To explain what ‘repeat’ means
* To modify a count-controlled loop to produce a given outcome
* To decompose a task into small steps
* To create a program that uses count-controlled loops to produce a given outcome

Enrichment: Coding Club | **Programming B – Repetition in games*** To develop the use of count-controlled loops in a different programming environment
* To explain that in programming there are infinite loops and count-controlled loops
* To develop a design that includes two or more loops which run at the same time
* To modify an infinite loop in a given program
* To design a project that includes repetition
* To create a project that includes repetition

Enrichment: Coding Club |
| Year 5 | **Computing systems and networks – Sharing information**• To explain that computers can be connected together to form systems• To recognise the role of computer systems in our lives• To identify how to use a search engine• To describe how search engines select results• To explain how search results are ranked• To recognise why the order of results is important, and to whomEnrichment: Coding Club | **Creating media – Vector drawing**• To identify that drawing tools can be used to produce different outcomes • To create a vector drawing by combining shapes• To use tools to achieve a desired effect• To recognise that vector drawings consist of layers • To group objects to make them easier to work with• To apply what I have learned about vector drawingsEnrichment: Coding ClubE-Safety Audit | **Creating media – Video editing**• To explain what makes a video effective• To capture video using a range of techniques• To create a storyboard• To identify that video can be improved through reshooting and editing• To consider the impact of the choices made when making and sharing a videoEnrichment: Safer Internet DayCoding Club | **Data and information – Flat-file databases**• To use a form to record information• To compare paper and computer-based databases• To outline how you can answer questions by grouping and then sorting data• To explain that tools can be used to select specific data • To explain that computer programs can be used to compare data visually• To use a real-world database to answer questions Enrichment: Coding Club | **Programming A – Selection in physical computing**• To control a simple circuit connected to a computer • To write a program that includes count-controlled loops• To explain that a loop can stop when a condition is met• To explain that a loop can be used to repeatedly check whether a condition has been met• To design a physical project that includes selection• To create a program that controls a physical computing projectEnrichment: Coding Club | **Programming B – Selection in quizzes**• To explain how selection is used in computer programs• To relate that a conditional statement connects a condition to an outcome• To explain how selection directs the flow of a program• To design a program that uses selection• To create a program that uses selection• To evaluate my programEnrichment: Coding Club |
| Year 6 | **Communication and Collaboration.**-To explain the importance of internet addresses.-To recognise how data is transferred across the internet-To explain how sharing information online can help people to work together-To evaluate different ways of working together online-To recognise how we communicate using technology-To evaluate different methods of online communicationEnrichment: Coding Club | **Web page creation**-To review an existing website and consider its structure-To plan the features of a web page-To consider the ownership and use of images (copyright)-To recognise the need to preview pages-To outline the need for a navigation path-To recognise the implications of linking to content owned by other peopleEnrichment: Coding ClubE-Safety Audit | **Programming A – Variables in games**-To define a ‘variable’ as something that is changeable-To explain why a variable is used in a program-To choose how to improve a game by using variables-To design a project that builds on a given example-To use my design to create a project-To evaluate my projectEnrichment: Safer Internet DayCoding Club | **Introduction to spreadsheets**-To create a data set in a spreadsheet-To build a data set in a spreadsheet-To explain that formulas can be used to produce calculated data-To apply formulas to data-To create a spreadsheet to plan an event-To choose suitable ways to present dataEnrichment: Coding Club | **3D modelling**-To recognise that you can work in three dimensions on a computer-To identify that digital 3D objects can be modified-To recognise that objects can be combined in a 3D model-To create a 3D model for a given purpose-To plan my own 3D model-To create my own digital 3D modelEnrichment: Coding Club | **Programming B – Sensing**-To create a program to run on a controllable device-To explain that selection can control the flow of a program-To update a variable with a user input-To use an conditional statement to compare a variable to a value-To design a project that uses inputs and outputs on a controllable device-To develop a program to use inputs and outputs on a controllable deviceEnrichment: Coding Club |