

NC Knowledge and Computational Skills	Pupils not securing learning	Pupils achieving depth
Autumn 1 – E-Safety, Data Handling, Animation Key Questions What are our rules for using technology safely? How can we capture information within a chart or graph? Can you choose the correct graph for the data? How can you produce smooth movement in a stop motion animation? What is the difference between stop motion animation and screen recording animation? <u>NC objectives covered:</u> -Use technology purposefully to create, organise, store, manipulate and retrieve digital content) -Can understand and apply the fundamental principles and concepts of computer science, including data representation <i>E-Safety - Use technology safely, 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.</i> <u>Unit objectives:</u> All children are able to: - Recall some of SMART rules (N.B. ‘Tell’). -Complete a tally and a pictogram -Be able to use bar/block/pie charts -Move one object in a stop motion animation -Create a screen motion animation Some will: -Recall all the SMART rules		

-Accurately label the pictogram -Be able to use line charts -Move several objects in a stop motion animation -Use a variety of backdrops in their screen motion animation		
Autumn 2 – E-Safety/ Word Processing/Digital Art Key Questions What are our rules for using technology safely and respectfully? What is cyberbullying? How can we use a paint package to make interesting patterns? How can we use text within a paint package? What are pixels and how are they used? How can we edit our work to make our poster clearer and more effective? <u>NC objectives covered:</u> -Use technology purposefully to create, organise, store, manipulate and retrieve digital content <i>E-Safety - Use technology safely, 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.</i> <u>Unit objectives:</u> All children are able to: -Recall some of SMART rules and explain what cyber bullying is.		

-Use a word processing package to write a short non-narrative text and edit the text -Use lines and fill tools to make interesting patterns. -Add a variety of shapes (outlines and fill) and label them with text Some will: - Recall all the SMART rules and have an understanding of similarities and differences between cyber and other bullying -Confidently use the edit functions of change size, style and colour of font -Use the line tool to make triangle shapes to fill -Add a greater range of shapes using line/pencil tool		
Spring 1 –E-Safety, Word Processing, Digital Art Key Questions -Is all information on the internet accurate? -What do I do if I find something inappropriate online? -How can we edit our work to make our information clearer and more effective? -How can we use images alongside text to enhance our work? -How can we use tools within a paint package to communicate a specific idea or artistic style/effect? <u>NC objectives covered:</u> -Use technology purposefully to create, organise, store, manipulate and retrieve digital content <i>E-Safety - Use technology safely, respectfully, keeping personal information private.</i>		

<u>Unit objectives:</u> All children are able to: - Recall some of SMART rules and explain what to do if they find something inappropriate online. They understand that not all information online is accurate -Use an appropriate site engine to research information -Use a word processing package to write a short non-narrative text and edit the text -Copy and paste images into Word -Use an art package to produce a picture of an elephant Some will: -Recall all the SMART rules -Use quotation marks to support the accuracy of their research -Confidently use the edit functions of change size, style and colour of font -Be able to resize the images -Use tools with artistic effect		
Spring 2 – E-Safety/Developing programming skills <u>Key Questions</u> Is all information on the internet accurate? What do I do if I find something inappropriate online? How can we edit our work to make our information clearer and more effective? How can we use images alongside text to enhance our work? How can we create and debug a simple program? How can we simplify a program by using a loop?		

<u>NC objectives covered:</u> -Use technology purposefully to create, organise, store, manipulate and retrieve digital content -Use logical reasoning to predict the behaviour of simple programs -Understand what algorithms are -Create and debug simple programs E-Safety - <i>Use technology safely, 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</i> <u>Unit Objectives:</u> All children will be able to: -Recall some of SMART rules and explain what to do if they find something inappropriate online. -Use an appropriate site engine to research information and answer questions. -Use a word processing package to write a short non-narrative text and edit - text and images -Create and debug simple programs by selecting code blocks, placing them in the correct sequence and executing a program. -Simplify a program by using a loop Some children will: - Recall all the SMART rules -Use quotation marks to support the accuracy of their research -Confidently use the edit functions of change size, style and colour of font. Be able to resize the images -Use logical reasoning to predict the behaviour of simple programs.		
--	--	--

-Simplify a program using more than one loop		
Summer 1 –E-Safety/Simple Coding/Programming with Scratch Junior Key Questions Why is it important to be responsible on the internet? How can we create and debug a simple program? How can we program audio and text? How do we program inputs? <u>NC objectives covered:</u> -Use logical reasoning to predict the behaviour of simple programs -Create and debug simple programs -Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions. <i>E-Safety - Use technology safely, 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</i> <u>Unit Objectives:</u> All children are able to: -Talk about why it is important to be responsible on the internet -Program movements -Program outputs for audio or text -Debug a program by correcting errors -Program inputs (touch or click) to move a sprite -Program conditions		

Some children will: -Be able to discuss these issues confidently and with a greater awareness of issues -Confidently develop their programs and add additional features -Be able to see the errors without support and rewrite the program -Confidently develop their programs and add additional features		
Summer 2 – E-Safety/Internet research/Word processing/Multi-media presentation Key Questions -How can we use a paint package to produce a picture using pointillism? -How can we stay safe online? -How can we edit our work to make our information clearer and more effective? -How can we produce an ebook? <u>NC objectives covered:</u> -Recognise common uses of information technology beyond school. -Use technology purposefully to create, organise, store, manipulate and retrieve digital content <i>E-Safety - Use technology safely, 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</i> <u>Unit Objectives:</u> All children are able to: -Understand that not all information online is accurate		

-Understand some of the dangers of meeting up with someone they met on line -Add a book cover with title, author, colour and image. -Add multiple pages based on a theme. -Add text on different pages. -Add images on different pages to match the theme/text -Add voice recordings to match the text and theme. Some children will: - Be able to discuss these issues confidently and with a greater awareness of issues -Complete more pages with increasing sophistication in their use of text and images -Ensure their recordings are clear and fluent		
---	--	--