Our scheme of work has been colour coded in to: Computer Science, Information Technology and Digital Literacy.

Enrichment/Personal development – Confidence in using a range of equipment, preseting information and considering improvements in own learning.
SMSC/ Cultural Capital – Showing an awareness of how technology has influenced society and an appreciation of technology from different time periods and cultures
Careers – Careers in Computing and Technology
British Values – To understand and abide by rules and laws relating to the use of technology
Equality – To have access to a range of technology and have the opportunity to develop skills in a range of areas
Independence – Individual skills developed through a range of opportunities to use digital media, presentations and technology
Community – Safety in our community (electrical pylons etc.) and safety in the home
Outdoor learning –EYFS/Y1 - Outdoor provision, Forest School, Use of technology and systems

Ongoing:

- Ipads – scroll, swipe, click, find known games from home screen links
- Laptops – use a keyboard and mouse

Year 1 - Computing	**Autumn Term**
Unit: Technology Around Us/Information Technology around us	
National Curriculum Link: See TEACH COMPUTING KS1 Teacher Guide p7	
Prior Learning: Early Years	
Key Essential Skills and knowledge: **<u>Unit 1 – Technology Around Us</u>** I can identify technology I can identify the toolbar and use bold and change font and size I can type capital letters I can use the space bar I can find letters on a keyboard to type words I can insert a picture from a picture box I can follow rules for using technology responsibly I know what a computer is and what its main parts are called. I know how to use a keyboard and how to edit using the delete key I know how to use technology purposefully. I know I can change the keyboard output to upper and lowercase letters. I know using different fonts and sizes changes the appearance of my work. **<u>Unit 2 - Information Technology around us</u>** I can recognise the uses and features of information technology: describing some uses of computers and examples of computers. To can identify information technology in school and at home and say what it is used for. I can explain the benefits of IT and how devices work together. I can recognise how to use IT responsibly and that rules are in place to keep me safe and help me.	

I can identify what is appropriate and inappropriate behaviour on the internet I can demonstrate how to safely open and close applications and log on and log off from websites I know what information technology is and how it helps people at home, in school and in the wider world. I know that devices are often linked and work together. I know that networks are connected systems I know rules that help keep us safe and healthy in and beyond the home when using technology I know what things count as personal information and how to keep personal information private I know who to go to for help and support if I have concerns about online content/contact
Vocabulary: Unit 1 - Computer mouse/trackpad, draw, click, double-click, click and drag Input device, keyboard, shift, space bar, capital letter, full stop Safely, responsibly, computer, technology Unit 2 - Information technology (IT), computer, barcode, scanner/scan, USB (memory stick), resize, device Appropriate, permission safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet.
Sequence: **See planning units**
Thinking Deeper: Independently apply their knowledge and skills for different purposes
Hardware/Software: Laptops; Microsoft Paint/Paint.net and Powerpoint

Year 1 - Computing **Autumn Term**
Unit: Grouping Data/Pictograms
National Curriculum Link: See TEACH COMPUTING KS1 Teacher Guide p7
Prior Learning: Early Years
Key Essential Skills and knowledge: **<u>Unit 1 Grouping Data</u>** I can describe objects using labels and match objects to a group. I can count groups of objects and describe their properties. I can count and group objects with the same properties I can compare groups of objects and answer questions about them. **<u>Unit 2 Pictograms</u>** I can count and compare objects (data) using tally charts, comparing totals. I can enter data on a computer and view that data in a different format: I can use a pictogram to answer simple questions about the data. I can use a tally chart to create a pictogram. I can answer 'more than'/'less than' and 'most/least' questions about an attribute. I can create a pictogram to arrange objects by attributes. I can create a pictogram to compare people by a common attribute. I can explain that we can present information using a computer and that sometimes it is this data should not be shared. I know how to create a pictogram from collected data in a tally chart. I know how to search for specific information or data. I know that I shouldn't share personal information online.
Topic Vocabulary: Unit 1 - Group, search, image, size, shape, object, property, value, label, colour, data set, more, less, most, least, fewest, the same Unit 2 - More than, less than, most, least, organise, data, object, tally chart, votes, total Pictogram, enter, compare, objects, count, explain, more, less, more common, least common, attribute, group, same, different, more than/less than, most/least, sharing, data, most popular, least popular, conclusion, block diagram
Sequence: **See planning unit**
Thinking Deeper: Group objects by their properties.
Hardware/Software: Digital camera/Ipads; Laptops; Microsoft Powerpoint, Just 2 Easy: Pictogram Just 3 Easy: Chart

Year 1 - Computing **Spring Term**
Unit: Moving a Robot/Robot Algorithms
National Curriculum Link: See TEACH COMPUTING Teacher Guide p7
Prior Learning: Early Years
Key Essential Skills and knowledge: **<u>Unit 1 Moving a Robot</u>** I can use a start block in a program I can use more than one block by joining them together I can compare left and right turns I can experiment with turn and move commands to move a physical computer I can use event, action and object code blocks I can select appropriate background artwork for a project I know that an algorithm is a set of instructions used to solve a problem or achieve an objective. I know that an algorithm written for a computer is called a program. I know finding errors in an algorithm is called debugging. I know different code blocks have different purposes. **<u>Unit 2 Robot Algorithms</u>** I can choose a series of words that can be enacted as a sequence. I can create different algorithms for a range of sequences using the same commands and show the difference in outcomes between two sequences that have the same command. I can predict the outcome of my algorithm and compare this with what did happen. I can explain that programming projects can have code and artwork. I can design a specific algorithm to meet my goal and explain what it should achieve. I can create and debug a program that I have written I know computers require simple, precise instructions to perform. I know how to identify and correct some simple errors (debugging). I am beginning to understand that computer networks provide access to the internet etc.
Topic Vocabulary: Unit 1- sequence, program, debug, challenge, instructions, event, action, object, block, command, forwards, backwards, turn, clear, go, plan, left, right, directions, algorithm, route Unit 2 - instruction, sequence, clear, unambiguous, algorithm, program, sequence, order, algorithm, commands, prediction, artwork, design, route, mat, debugging, decomposition
Sequence: **See planning unit**
Thinking Deeper: Explain the possible actions of objects including moving, responding to being clicked on and collision with other objects. Use their prior coding experience to recognise whole blocks of familiar code. Apply their knowledge as a transferable skill across a range of debugging scenarios. Predict outcomes in more complex code.
Hardware/Software: Bee-bots

Year 1 – Computing	**Summer Term**
Unit: Digital writing	
National Curriculum Link: See TEACH COMPUTING Teacher Guide p7	
Prior Learning: Early Years	
Key Essential Skills and knowledge: **<u>Unit 1</u>** I can find and identify keys on a key pad. I can use a computer to write I can add and remove text on a computer using the backspace key. I can change the look of the text by using bold, italic and underlining. I can make careful choices when changing text, for example, changing the font, selecting a word by double clicking or clicking and dragging. To explain why I used the tools that I chose. To compare writing on a computer with writing on paper I know how to use Microsoft Word. I know how to change the font and use bold, italic and underline.	
Topic Vocabulary: Word processor, keyboard, mouse, cursor, select, font, toolbar, bold, italic, underline, Microsoft Word, keys, letters, type, numbers, space, backspace, text, capital letters, undo, redo, format, writing, typing, compare	
Sequence: **See planning unit**	
Thinking Deeper: Independently apply their skills in a range of subject areas and for different purposes	
Hardware/Software: Microsoft Word	

Year 1 – Computing	**Summer Term**
Unit: Digital painting	
National Curriculum Link: See TEACH COMPUTING Teacher Guide p7	
Prior Learning: Early Years	
Key Essential Skills and knowledge: **<u>Unit 1</u>** I can draw lines and make marks on a screen and explain which tools I used I can make marks with the square and line tools I can use the shape and line tools effectively I can use the shape and line tools to recreate the work of an artist I can explain why I have chosen specific tools I know how to create an image using a program I know how to select different tools to create different effects.	
Topic Vocabulary: size, toolbar, shift, shape, line, tools, insert, paintbrush, erase, fill, undo, paint program, colour, size	
Sequence: **See planning unit**	
Thinking Deeper: Independently apply their skills to create images for a range of purposes	
Hardware/Software: Laptops; Microsoft Paint	

Year 1 - Computing	**OPTIONAL UNIT**
Unit: Programming Quizzes	
National Curriculum Link: See TEACH COMPUTING Teacher Guide p7	
Prior Learning: Early Years/Y1	
Key Essential Skills and knowledge: **<u>Unit 2</u>** I can listen to music, for longer periods of time, identifying differences in pieces and say how it makes me feel. I can create a rhythm pattern and follow a rhythm pattern on a percussion instrument. I can use a computer to experiment with pitch and duration.: I can use a computer to create a musical pattern using three notes, refining my pattern I can create and save a musical pattern to describe an animal. I can evaluate my work stating how I could improve it. I can reopen it. I know how to edit more complex digital data such as music compositions. I know how to use a range of media in their digital content including photos, text and sound and present ideas. I know notes in music are arranged in a sequence. Changing the order changes the sound.	
Topic Vocabulary: music, planets, Mars, Venus, war, peace, quiet, loud, feelings, emotions, pattern, rhythm, pulse, Neptune, pitch, tempo, rhythm, notes, instrument, create, emotion, pitch, pulse/beat, open, edit	
Sequence: **See planning unit**	
Thinking Deeper: Import their own images and drumbeats, seamlessly using different aspects of Music Lab.	
Hardware/Software: Laptops; Chrome Music Lab	