



A curriculum planned with aspirations for all pupils to:

- Be creators not consumers
- To have the knowledge and skill needed to best prepare pupils for a future in an environment shaped by technology.
- To understand that there is always a choice when using technology.
- Inspire pupils to share their learning in creative ways.
- Have the confidence to use the internet safely to achieve a purpose.
- A secure understanding of the risks of using the internet and social media.



COMPUTING KNOWLEDGE STRANDS

**INFORMATION
TECHNOLOGY**

**DIGITAL
LITERACY**

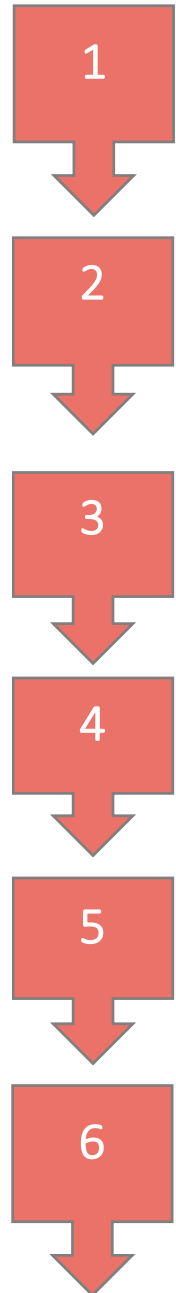
**COMPUTER
SCIENCE**

COMPUTING

COMMUNICATION
AND
LANGUAGE
DEVELOPMENT



Subject Progression Framework



- New learning to begin by recalling and recapping prior learning and vocabulary.
- Underpin technical and formal knowledge (substantive)
- Introduce new vocabulary and the strand of the computing curriculum.
- If appropriate, complete an unplugged lesson.

- Spend time evaluating componential thinking concepts (logic, evaluation, algorithms, patterns, decomposition, and abstraction) and approaches (tinkering, creating, debugging, persevering and collaboration).
- Discuss which concepts and approaches will be used in the unit and how they can also be used in other curriculum subjects.

- Dedicated session and resources help children to build on prior knowledge at the same time as introducing new skills and challenges.
- In KS1, the focus is on developing the use of algorithms, programming and how technology can be used safely and purposefully.
- In KS2, lessons still focus on algorithms, programming and coding but in a more complex way and for different purposes. Children also develop their knowledge of computer networks, internet services and the safe and purposeful use of the internet and technology.
- Data Handling is featured more heavily in UKS2. Children are given the opportunity to test their knowledge gained throughout the unit.
- Over these sessions, children will build knowledge to support them in completing an intended outcome.

- Complete end point outcome and share with others (For example through peer-to-peer work or online audience)

- Review and evaluate end point, reflecting on feedback and considering how this could be changed or developed further.
- Recap on the importance of the skills gained and how this knowledge and skill could be utilised in everyday life.

Computer Science

The technical design of new software, solution to computing problems and the development of different ways to use technology.

Information Technology

The technical knowledge, design, use and understanding of hardware and software; computers and electronic systems for storing and using information.

Digital Literacy

The technical skills and ability to use information and communication technology to find, create, evaluate and communication information.

Code

Using and writing codes to produce instructions and algorithms; to solve problems; to test and use logic and sequences against inputs and outputs.

Connect

Being able to safely, efficiently and confidently digitally connect with others.

Communicate

Being able to safely, efficiently and confidently use apps and information technology to communicate ideas.

Communicate

Being able to safely, efficiently and confidently find, evaluate, store, sort and use appropriate data.

CURRICULUM STRANDS	Information Technology		Computer Science		Digital Literacy		Communication and Language Development
EYFS	See EYFS Tapestry Curriculum for Birth to Early Learning Goal Curriculum. The EYFS Tapestry feeds into the Key Stage One Curriculum.						
Key Vocabulary	Computers Screen Keyboard Mouse		Technology Learning		Online Information		
KS1 Year 1  Year 2 	- Pupils know how to confidently type words quickly and correctly on a digital device. They are able to use the space bar to make space and delete to delete letters and words. - They understand how to make a new line using enter. They are able to dictate into a digital device more accurately and with punctuation. - I know how to use the space bar only once between words and use touch to navigate to words letter to edit - I know how to copy and paste images and text. - I know how to use caps locks for capital letters. - I know how to add images alongside text in a word processed document. - I know how to dictate longer passages into a digital device with accurate punctuation		- Pupils are able to predict the outcome of algorithms using logical reasoning and are beginning to explore the meaning of decomposition. - Children are able to test and debug algorithms and examine how to debug programs of increasing complexity. - Pupils are able to predict outcome of simple programs using logical reasoning and investigate and understand what a computer is. - Pupils are able to practice greater control when taking photos with tablets.		- Pupils understand that there are people online who could make them feel sad or upset. - Using the internet children to learn how to communicate with others outside of school (tweeting another school) and use this as an opportunity to be kind and considerate to people online. - Pupils show an understanding that information put online can last for a long time and understand who to talk to if they have made a mistake. - Pupils begin to use the internet for research and through the use of key words in search engines. - Pupils begin to understand the importance of keeping information private and how other peoples work belongs to them.		
Key Vocabulary	Y1 Space Bar Delete Return Key Enter	Y2 Cut Copy Paste Caps Lock Insert Image Save, Clipboard Editing Highlight	Y1 Algorithm Sequence Order Bug Fix	Y2 Decomposition Debug Predict Logical Reasoning	Y1 World Wide Web Risk Minimise	Y2 Social Media Adverts Pop ups	

CURRICULUM STRANDS	Information Technology		Computer Science		Digital Literacy		Communication and Language Development
LKS2 Year 3  Year 4 	- I know how to use index fingers on keyboard home keys (f/j), use left fingers for a/s/d/f/g, and use right fingers for h/j/k/l - I know how to edit the style and effect of my text and images to make my document more engaging and eye-catching. For example, borders and shadows. - I know how to use cut, copy and paste to quickly duplicate and organise text. - I know how to combine digital images from different sources, objects, and text to make a final piece of a variety of tasks: posters, documents, eBooks, scripts, leaflets. - I know how to confidently and regularly use text shortcuts such as cut, copy and paste and delete to organise text - I know how to use font sizes appropriately for audience and purpose. Use spell check and thesaurus including through Siri and other AI technology		- Pupils show increasing confidence in their ability to detect and correct errors in programs alongside being able to write increasingly more precise algorithms when programming. - Pupils will explore the use of abstraction to focus on what is important in design. - They can detect and correct errors and use simple selections in programs. - They can explore the main components of the hardware which allow computers to join a network and analysing the key components. - Pupils can identify ways the internet can be used to provide methods of communication.		- Pupil show that they are starting to use search engines more effectively through the use of key phrase and are able to analyse the differences between opinions and facts. - Pupils will explore why strong passwords are important and simple strategies for keeping passwords safe.		- Children are able to describe rules of how to behave online and why they need to be careful when posting content. - They are able to explain what bullying is and different technologies where it may take place. - Pupils can explain why there are age restrictions and follow simple steps in dealing with inappropriate content
Key Vocabulary	Y3 Touch type Edit Format Font Size Borders Shadows Duplicate, Organise Undo Redo, Autocorrect	Y4 Group Crop Source Object Posters Documents E Books Scripts Leaflets CTRL Spell check Thesaurus Record	Y3 Abstraction Pattern Inputs Outputs Network LAN (Local Area Network)	Y4 Loop Forever loop Internet Router Web page	Y3 Online User Personal information SMART	Y4 Cyber bullying Accurate Opinion	

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UKS2 Year 5  Year 6 	- Pupils can apply effects to their documentation such as hyperlinks. - They understand how to import sounds to accompany and enhance text in a document. - Pupils understand how to organise text, format text and select the best application to suit a purpose. - They are able to publish their documents online regularly and discuss the audience and purpose.		- Pupils can write precise algorithms when programming whilst exploring the use of variables. - They can decompose code for effective debugging, critically evaluate work and suggest improvements. - Pupils explore a range of sequence, selection and repetition commands combined with variables as required to implement design. - Pupils understand both the values and the dangers of a computational network.		- Pupils evaluate digital content and explain how to make choices whilst recognising the information that they may need to check the validity. - Pupils understand the value of the use of strong and secure passwords across a range of accounts and understand what to do if a password has been stolen.		- Pupils can describe how to help someone who is being bullied online and explain how to report concerns both in school and at home. - Pupils can communicate their understanding of internet safety and ways in which themselves, and others, can protect themselves online - Pupils can confidently articulate the reasons for age restrictions, the processes of how these are developed and what they consider to be inappropriate
Key Vocabulary	Y5 Import Export Hyperlinks Animate Build In Build Out Italics Bold Arrange Bullets	Y6 Alignment application Tabs Toolbar Build order Layout Shift key PDF Columns Graphics	Y5 Condition Variables Value Simulate Search engine Spiders Keywords Transmit	Y6 Abstraction Conditional loop Critical Logic HTML	Y5 Wiki's Verify Publish Tag	Y6 Copyright Impact Digital Footprint Content	

Cohort attainment and progress tracker

(Entering=E, Beginning=B, Developing=D, Meeting=M, Exceeding=Exc, Greater Depth Standard=GDS)

Cohort's Achievement Each Term (%)							
		E	B	D	M	Exc	GDS
Year 1	Autumn						
	Spring						
	Summer						
Year 2	Autumn						
	Spring						
	Summer						
Year 3	Autumn						
	Spring						
	Summer						
Year 4	Autumn						
	Spring						
	Summer						
Year 5	Autumn						
	Spring						
	Summer						
Year 6	Autumn						
	Spring						
	Summer						

Continuous dialogue reflecting yearly progress of learning and notes to feedforward for future planning.

	Notes and feedforward (Individual pupils, group, class)	QA by Subject Leader
EYFS		
Year 1		
Year 2		
Year 3		
Year 4		
Year 5		
Year 6		