

CURRICULUM MAP (Long term plan)

SUBJECT : Computing

YEAR GROUP: 5

	Cycle 1 Autumn	Cycle 2 Spring	Cycle 3 Summer
Substantive knowledge – Essential knowledge & conceptual understanding of the National Curriculum	<p>Sharing information</p> <p>Digital literacy skills Effective use of tools Information technology Computer systems Networks</p> <p>Vector Drawing</p> <p>Creating media Design and development Effective use of tools Information technology</p>	<p>Selection in physical computing</p> <p>Algorithms Programming</p> <p>Databases</p> <p>Data and information Effective use of digital tools Programming</p>	<p>Create a website</p> <p>Creating media Design and development Effective use of tools Information technology Safety and security</p>
Disciplinary knowledge - what skills are practiced?	<p>Sharing information</p> <p>Understand the school network and why it is important</p> <p>Be discerning in evaluating digital content</p> <p>Use technology safely, respectfully and responsibly</p> <p>Understand computer networks including the internet</p> <p>Vector Drawing</p> <p>Use Google Drawings to create simple drawings</p>	<p>Selection in physical computing</p> <p>Make a sequence that includes a variable</p> <p>Define a condition as an expression that will be evaluated as either true or</p> <p>Identify that selection uses conditions to control the flow of a sequence</p> <p>Identify where selection statements can be used in a program</p> <p>Modify a program to include selection</p>	<p>Create a website</p> <p>Use technology safely, respectfully and responsibly</p> <p>Recognise acceptable/unacceptable behaviour</p> <p>Select and use appropriate software to create a website</p> <p>Put images onto a website (and videos)</p> <p>Use search engines to locate information</p> <p>Be selective about which information to include.</p>

	<p>Implement different tools into your vector drawings (zoom, copy and paste, shape, colour, etc.)</p>	<p>Detect and correct errors in a program (debugging)</p> <p>Databases</p> <p>Identify records and fields in databases</p> <p>Use sorting functions to organise data in the correct way</p> <p>Use comparison operators (<, >, and, or, etc.) to locate specific data required to answer questions</p> <p>Use databases to solve real world problems.</p>	
<p>Key questions (What is the learning about?)</p>	<p>Can I explain that computers can be connected together to form systems?</p> <p>Can I recognise the role of computer systems in our lives?</p> <p>Can I recognise how information is transferred over the internet?</p> <p>Can I explain how sharing information online lets people in different places work together?</p> <p>Can I evaluate different ways of working together online?</p> <p>Can I identify that drawing tools can be used to produce different outcomes?</p>	<p>Can I explain how to set up a simple circuit on a computer?</p> <p>Can I understand how to use loops in a program?</p> <p>Can I explain count-controlled and condition-controlled loops?</p> <p>Can I define the word database?</p> <p>Can I compare paper and computer-based databases?</p> <p>Can I explain how to use tools on a database software?</p>	<p>Can I compare and review existing websites?</p> <p>Can I describe copyright law and the use of images?</p> <p>Can I use images and videos on a web page?</p> <p>Can I include links to internal and external sources on a website?</p>
<p>Assessment</p>	<p>End of unit online tests. Teacher assessment of project (creating a vector drawing).</p>	<p>End of unit online tests.</p>	<p>Teacher assessment of project (creating a website).</p>

Verbal feedback used in place of live marking approach.			
Literacy (L), Numeracy (N), Oracy (O) opportunities	Use of shapes in vector drawing. Use of technical vocabulary for computer networks.	Problem solving and algorithmic thinking.	Writing and presenting information suitable for audience and purpose.
Cross Curricular Opportunities	English - drawing is based on the Curse of the Maya book. Art - use of vector drawing compared to artistic drawing.	English - 'real-life' scenario based on Kensuke's Kingdom. Geography - see different countries' flags and populations, etc.	History - website based on the Tudors.
SMSC / Character/Careers/Cultural Capital (personal development)	Peer support and experimentation. Confidence. Resilience. Initiative.	Resilience, initiative, aspiration.	Integrity. Aspiration, Creativity. Resilience, Initiative, Confidence.
Equality and Diversity	Names and characters used in presentations represent people with disabilities and different ethnicities.	Names and characters used in presentations represent people with disabilities and different ethnicities.	Names and characters used in presentations represent people with disabilities and different ethnicities.
Super Curriculum (personal development)	Code club	Code club	Code club