



**Computing Whole School Mapping**  
**NC Objectives**  
**UKS2**

**Year 5**

<b>Cycle 1</b>	Fabulous Food	Exploring Hinduism	Journey to Space	World War One	RSE Focus	Greeks
<b>Cycle 2</b>	Famous People	Mayans	Asia	Vikings	Plants	Sporting Champions
<b>Teach Computing Unit</b>	Computing systems and networks – Sharing information	Programming A – Selection in physical computing	Creating Media – Video editing	Creating Media – Vector Drawing	Data and information – Flat-file databases	Programming B – Selection in quizzes
<b>Online Safety Unit</b>	Privacy and Security	Managing Online Information	Self-Image and Identity	Online Bullying	Online Relationships	Online Reputation

**National Curriculum Objectives**

**Teach Computing Learning Objectives**

<b>Autumn 1</b> Computing systems and networks – Sharing information	<ul style="list-style-type: none"> <li>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration</li> <li>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> <li>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> <li>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> </ul>	<ul style="list-style-type: none"> <li>To explain that computers can be connected together to form systems</li> <li>To recognise the role of computer systems in our lives</li> <li>To recognise how information is transferred over the internet</li> <li>To explain how sharing information online lets people in different places work together</li> <li>To contribute to a shared project online</li> <li>To evaluate different ways of working together online</li> </ul>
<b>Autumn 2</b> Programming A – Selection in physical computing	<ul style="list-style-type: none"> <li>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> </ul>	<ul style="list-style-type: none"> <li>To control a simple circuit connected to a computer</li> <li>To write a program that includes count-controlled loops</li> <li>To explain that a loop can stop when a condition is met</li> <li>To explain that a loop can be used to repeatedly check whether a condition has been met</li> <li>To design a physical project that includes selection</li> <li>To create a program that controls a physical computing project</li> </ul>
<b>Spring 1</b> Creating Media – Video editing	<ul style="list-style-type: none"> <li>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> <li>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> <li>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> </ul>	<ul style="list-style-type: none"> <li>To explain what makes a video effective</li> <li>To identify digital devices that can record video</li> <li>To capture video using a range of techniques</li> <li>To create a storyboard</li> <li>To identify that video can be improved through reshooting and editing</li> <li>To consider the impact of the choices made when making and sharing a video</li> </ul>
<b>Spring 2</b> Creating Media – Vector Drawing	<ul style="list-style-type: none"> <li>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> </ul>	<ul style="list-style-type: none"> <li>To identify that drawing tools can be used to produce different outcomes</li> <li>To create a vector drawing by combining shapes</li> <li>To use tools to achieve a desired effect</li> <li>To recognise that vector drawings consist of layers</li> <li>To group objects to make them easier to work with</li> <li>To evaluate my vector drawing</li> </ul>
<b>Summer 1</b> Data and information – Flat-file databases	<ul style="list-style-type: none"> <li>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> <li>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> </ul>	<ul style="list-style-type: none"> <li>To use a form to record information</li> <li>To compare paper and computer-based databases</li> <li>To outline how grouping and then sorting data allows us to answer questions</li> <li>To explain that tools can be used to select specific data</li> <li>To explain that computer programs can be used to compare data visually</li> <li>To apply my knowledge of a database to ask and answer real-world questions</li> </ul>
<b>Summer 2</b> Programming B – Selection in quizzes	<ul style="list-style-type: none"> <li>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> </ul>	<ul style="list-style-type: none"> <li>To explain how selection is used in computer programs</li> <li>To relate that a conditional statement connects a condition to an outcome</li> <li>To explain how selection directs the flow of a program</li> <li>To design a program which uses selection</li> <li>To create a program which uses selection</li> <li>To evaluate my program</li> </ul>