

|  | AUTUMN 1  | AUTUMN 2   | SPRING 1   | SPRING 2   | SUMMER 1  | SUMMER 2  |
|--|---|--|--|--|---|---|
|  | Assessment 1  |  |  | Assessment 2   |   |   |
| <p><b>Core Course Topic:</b><br/>These topics are taught through the identified terms. They are taught in small bitesize chunks and revisited regularly.</p> | <p><b>Computer Components</b><br/><b>Graphical User Interface</b></p>   | <p><b>Graphical User Interface</b><br/><b>Creating GUI -GUI design</b></p>   | <p><b>Graphical User Interface (Promotional Project)</b><br/><b>Legislation</b></p> <p><b>Computer Components</b></p>  | <p><b>Text Based Programming</b><br/><b>Python</b></p>   | <p><b>Business &amp; Computing</b></p>  | <p><b>Online Behaviour + iMedia Project</b></p>   |
| <p><b>Additional support links:</b></p>  | <p><a href="https://studio.code.org/home">https://studio.code.org/home</a><br/><a href="https://classroom.thenational.academy/units/computer-systems-e17a">https://classroom.thenational.academy/units/computer-systems-e17a</a></p>  | <p><a href="https://teachers.thenational.academy/lessons/guis-6nj0c">https://teachers.thenational.academy/lessons/guis-6nj0c</a></p>   | <p><a href="https://teachers.thenational.academy/lessons/guis-6nj0c">https://teachers.thenational.academy/lessons/guis-6nj0c</a></p>   | <p><a href="https://classroom.thenational.academy/units/intro-to-python-programming-9c22">https://classroom.thenational.academy/units/intro-to-python-programming-9c22</a></p>   | <p><a href="https://classroom.thenational.academy/units/mobile-app-development-4fbc">https://classroom.thenational.academy/units/mobile-app-development-4fbc</a></p>  | <p><a href="https://teachers.thenational.academy/lessons/online-behaviour-rules-cmv30c">https://teachers.thenational.academy/lessons/online-behaviour-rules-cmv30c</a></p>  |
| <p><b>Knowledge:</b><br/>Included here is the specific knowledge your child will learn in detail</p>   | <p>Being able to understand how computer systems operate in the real world and improve their interaction with them</p> <p>Describe the features of Graphical User Interfaces</p> <p>Discuss the advantages and disadvantages of GUI</p> <p>Identify design features for GUIs</p> <p>Discuss the purpose of a navigation plan or site maps</p> <p>Identify accessibility features in user interfaces.</p> <p>Create a navigation plan/site map for a specified purpose</p> | <p>Being able to understand how computer systems operate in the real world and improve their interaction with them.,</p> <p>Practise the skills needed to create a user interface</p> <p>Create an interactive user interface for a client</p> | <p>Ability to apply knowledge of digital laws in any subject that is using digital platforms.</p> <p>Create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability.</p> <p>Understand the hardware and software components that make up computer systems, and how they communicate with one another and other system</p> | <p>Understand how programmes work and apply the same logic and problem-solving ability to other subjects and problems.</p> <p>Make programs that clearly and elegantly solve a given problem, or a scenario of their own design</p> <p>Clearly expand their programming knowledge to a high level through their own independent learning</p> <p>Make use of functions and procedures to create modular, extensible programs</p> <p>Understand that programming techniques are largely similar and apply their knowledge to other programming languages</p> <p>Document all program code, showing clear understanding of all code used – including that which</p> | <p>Evaluate:<br/>Why some entrepreneurs have been more successful than others<br/>The key factors that made well known entrepreneurs successful</p> <p>The key motivations for starting a business and why the rewards outweigh the risks</p> <p>The impact different types of business may have on key stakeholders and the responsibilities businesses may have in this scenario</p> <p>The benefits and drawbacks of PLC and LTD ownership</p> <p>The reasons why a sole trader or partnership may be the correct type of business to set up despite the liability risks</p> | <p>Understand negative influences and reasons why people may coerce online:</p> <ol style="list-style-type: none"> <li>Racism/homophobia/Transphobia</li> <li>Negative social media influences - weight loss, eating disorders, image etc</li> <li>Grooming</li> <li>Radicalisation</li> </ol> <p>Recognising the signs and situations in which harmful online behaviour can occur:</p> <ol style="list-style-type: none"> <li>Sexual harassment</li> <li>Grooming</li> <li>Cyberbullying</li> </ol> <p>Definition/meaning of sharing explicit images and videos</p> <ul style="list-style-type: none"> <li>Contexts of how that can happen (consensual, non consensual)</li> <li>Impacts</li> <li>Strategies for getting help</li> </ul> |

# Computing

Year 9

## Curriculum Overview



|  |  |  |  |  |   |  |
|--|--|--|--|--|---|--|
|  |  |  |  | <p>has been imported or copied from elsewhere</p> <p>Understand the concept of reusable code bases and make consistent use of these in their programs</p> <p>Convert numbers with fractional parts to binary</p>                 | <p>How a given business has approached identifying target markets and tackling issues facing their business</p> <p>Existing brand guideline documents in order to create a new brand for a given business scenario</p>  | <ul style="list-style-type: none"> <li>Laws governing online behaviour - sexting, trolling, harassment, stalking</li> </ul> <p>Understand Positive relationships:</p> <ul style="list-style-type: none"> <li>Examples of positive contributions online and how they effect change</li> <li>Examples of how to make positive contributions to online discussions and debates (twitter filters news story?)</li> </ul> <p>Understand how programmes work and apply the same logic and problem-solving ability to other subjects and problems</p> <p>Understand how programmes work and apply the same logic and problem-solving ability to other subjects and problems</p> <p>Pre-Production documents<br/>Planning multimedia products<br/>Creating multimedia products<br/>Graphic skills<br/>Evaluating multimedia products</p> |
| <p><b>Skills:</b><br/>Included here is the specific skills your child will learn in detail</p> | <p>Ability to understand and apply legislation knowledge to other areas.</p>   | <p>Create buttons, hyperlinks, use of Slide master to add user</p>   | <p>Laws and legal knowledge that is common across courses.</p> <p>Ability to discuss and apply legal knowledge.</p> <p>Computer hardware and software</p>  | <p>The ability to break down a problem, remove unnecessary details and create logical solutions</p>  | <p>Create a brand guideline which appears credible and professional, with sensible guidance and information about the chosen:</p> <ul style="list-style-type: none"> <li>Colour scheme</li> <li>Logo</li> <li>Font</li> <li>Sizing</li> <li>Permissible uses</li> </ul> | <p>The ability to break down a problem, remove unnecessary details and create logical solutions.</p> <p>Testing and evaluation skills.</p> <p>Recognising the signs and situations in which harmful online behaviour can occur</p>   |
| <p><b>Common Lexicon:</b><br/>These are the key words and terms learnt. These can be found</p> | <p>KS3 NC: understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct and know how to report concerns</p> | <p>KS3 NC: Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users.</p> | <p>KS3 NC: Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users.</p> | <p>KS3 NC: Understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem.</p> | <p>KS3 NC: Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users</p>         | <p>KS3 NC: Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users</p>  |



# Computing

Year 9

## Curriculum Overview

|  |   |   |  |   |  |  |
|--|---|---|--|---|--|--|
| on knowledge organisers.   |   |   |  |   |  |  |
| <p><b>Core Course Topic:</b><br/>These topics are taught through the identified terms. They are taught in small bitesize chunks and revisited regularly.</p> | <p>Links to Computer Science and iMedia curriculum.</p> <p>Links to graphics due to files being stored online and online working.</p> | <p>Links to Computer Science and iMedia curriculum.</p> <p>Ability to apply knowledge of digital laws in any subject that is using digital platforms.</p> | <p>Links to Computer Science and iMedia curriculum.</p> <p>The knowledge leads into the iMedia curriculum and into the graphics curriculum offered. Links to Photography and graphics courses.</p> | <p>Links to Computer Science and iMedia curriculum.</p> <p>Link to Maths - able to apply computational mathematics.</p> | <p>Links to Computer Science and iMedia curriculum.</p> <p>Links to Photography and graphics courses - storing and compressing images.</p> <p>Business &amp; iMedia KS4 course</p> | <p>Links to the computer science curriculum and maths for problem solving.</p> <p>Business &amp; iMedia KS4 course</p> |