

## Computing Overview 2022 - 2023

	<b>Autumn</b> 5 <sup>th</sup> September – 21 <sup>st</sup> October (7 weeks) 31 <sup>st</sup> October – 16 <sup>th</sup> December (7 weeks)	<b>Spring</b> 4 <sup>th</sup> January – 10 <sup>th</sup> February (5 weeks) 20 <sup>th</sup> February – 31 <sup>st</sup> March (6 weeks)	<b>Summer</b> 18 <sup>th</sup> April – 26 <sup>th</sup> May (6 weeks) 5 <sup>th</sup> June – 21 <sup>st</sup> July (7 weeks)
<b>Year 1</b>	<p style="text-align: center;"><b>Computer systems &amp; networks</b></p> <p><b>Using a computer responsibly</b> Learners will be introduced to the concept of using computers safely, within the context of a school setting.</p> <p style="text-align: center;"><b>Online safety</b></p> <p><b>Decision: Online bullying</b> Learners understand computers, the internet, and rules to keep safe.</p> <p style="text-align: center;"><b>Creating Media</b></p> <p><b>Digital painting and digital writing</b> Learners develop their understanding of a range of tools used for digital painting and digital writing.</p>	<p style="text-align: center;"><b>Online safety</b></p> <p>7<sup>th</sup> February Safer Internet Day (theme to be confirmed)</p> <p style="text-align: center;"><b>Data and Information</b></p> <p><b>Grouping data</b> Introduces learners to data and information</p>	<p style="text-align: center;"><b>Computer systems &amp; networks</b></p> <p><b>Technology around us and how it is used</b> Learners will develop their understanding of technology and how it can help them in their everyday lives. They will start to become familiar with the different components of a computer</p> <p style="text-align: center;"><b>Online safety</b></p> <p><b>Decision: Online bullying</b> Learners know who and how to ask for help and be able to recognise kind and unkind comments.</p> <p style="text-align: center;"><b>Programming</b></p> <p><b>Moving a robot</b> Introduces learners to early programming concepts</p>
<b>Year 2</b>	<p style="text-align: center;"><b>Computer systems &amp; networks</b></p> <p><b>Information technology around us</b> Learners will understand what information technology is at home and at school</p> <p style="text-align: center;"><b>Online safety</b></p> <p><b>Decision: Image Sharing and Computer Safety</b> Learners to be able to list rules for keeping and staying safe. To know the risks of sharing images without permission and understand the types of images that you should and should not post online</p> <p style="text-align: center;"><b>Creating Media</b></p> <p><b>Animated story book (2create a story)</b> Learners will develop the skills to create, organise, store, manipulate and retrieve digital content through the creation of their own animated story book.</p>	<p style="text-align: center;"><b>Online safety</b></p> <p>7<sup>th</sup> February Safer Internet Day (theme to be confirmed)</p> <p style="text-align: center;"><b>Data and Information</b></p> <p><b>Pictograms</b> Introduces the learners to the term 'data'</p>	<p style="text-align: center;"><b>Computer systems &amp; networks</b></p> <p><b>Information technology around us</b> Learners will explore IT in other environments that they may have experienced.</p> <p style="text-align: center;"><b>Online safety</b></p> <p><b>Decision: Image Sharing and Computer Safety</b> Learners to be able to name the positive and negative ways you can use technology</p> <p style="text-align: center;"><b>Programming</b></p> <p><b>Algorithms</b> Develop pupils' understanding of instructions in sequences and the use of logical reasoning to predict outcomes</p>
<b>Year 3</b>	<p style="text-align: center;"><b>Computer systems &amp; networks</b></p> <p><b>Connecting Computers</b></p>	<p style="text-align: center;"><b>Online safety</b></p> <p>7<sup>th</sup> February Safer Internet Day (theme to be confirmed)</p>	<p style="text-align: center;"><b>Computer systems &amp; networks</b></p> <p><b>Connecting Computers</b></p>

	<p>Learners develop their understanding of digital devices, with an initial focus on inputs, processes, and outputs.</p> <p><b>Online safety</b></p> <p><b>Decision: Making friends online</b> Learners be able to name the positives and negatives of using technology</p> <p><b>Creating Media</b></p> <p><b>Desktop publishing (2publish)</b> Learners will become familiar with the terms 'text' and 'images' and understand that they can be used to communicate messages.</p>	<p><b>Data and Information</b></p> <p><b>Branching Database</b> learners will develop their understanding of what a branching database is and how to create one.</p>	<p>Learners are introduced to computer networks, including devices that make up a network's infrastructure, such as wireless access points and switches.</p> <p><b>Online safety</b></p> <p><b>Decision: Making friends online</b> Learners be able to identify possible dangers and consequences of talking to strangers online. Learners to know how to keep safe in online chatrooms.</p> <p><b>Programming</b></p> <p><b>Events &amp; actions</b> Learners explore the links between events and actions, whilst consolidating prior learning relating to sequencing</p>
<p><b>Year 4</b></p>	<p><b>Computer systems &amp; networks</b></p> <p><b>The Internet</b> Learners will apply their knowledge and understanding of networks, to appreciate the internet as a network of networks which need to be kept secure.</p> <p><b>Online safety</b></p> <p><b>Decision: Online bullying</b> Learners identify the feelings and emotions that may arise from online bullying; to develop coping strategies to use if we or someone we know is being bullied online.</p> <p><b>Creating Media</b></p> <p><b>Bringing Images to life (photo editing)</b> Learners develop understanding of digital images. They transform and edit images, respecting copyright and ownership.</p>	<p><b>Online safety</b></p> <p>7<sup>th</sup> February Safer Internet Day (theme to be confirmed)</p> <p><b>Data and Information</b></p> <p><b>Data logging</b> Learners will consider how and why data is collected over time.</p>	<p><b>Computer systems &amp; networks</b></p> <p><b>The Internet</b> Learners will learn that the World Wide Web is part of the internet, they will evaluate online content to decide how honest, accurate, or reliable it is, and understand the consequences of false information.</p> <p><b>Online safety</b></p> <p><b>Decision: Online bullying</b> Learners recognise the key values that are important in positive online relationships and know how to ask for help.</p> <p><b>Programming</b></p> <p><b>Repetition in games</b> Learners explore the concept of repetition in programming</p>
<p><b>Year 5</b></p>	<p><b>Computer systems &amp; networks</b></p> <p><b>Sharing information</b> Learners will develop their understanding of computer systems and how information is transferred between systems and devices.</p> <p><b>Online safety</b></p> <p><b>Decision: Image Sharing and Adults' &amp; Children's Views</b> Learners list reasons for sharing images online and identify rules to follow when sharing images online.</p> <p><b>Creating Media</b></p>	<p><b>Online safety</b></p> <p>7<sup>th</sup> February Safer Internet Day (theme to be confirmed)</p> <p><b>Data and Information</b></p> <p><b>Databases</b> Learners discover how a flat-file database can be used to organise data in records</p>	<p><b>Computer systems &amp; networks</b></p> <p><b>Sharing information</b> Learners will consider how people can work together when they are not in the same location.</p> <p><b>Online safety</b></p> <p><b>Decision: Image Sharing and Adults' &amp; Children's Views</b> Learners to describe the positive and negative consequences of sharing images online and recognise possible influences and pressures to share images online.</p> <p><b>Programming</b></p>

	<p><b>Digital texts</b> Learners investigate computing storage capacities and ways of saving data. They will use varied resources to create digital content, creating and manipulating images and words.</p>		<p><b>Selection in programming</b> Learners develop their knowledge of selection by revisiting how conditions can be used in programs and then learning how the If... Then... Else structure can be used to select different outcomes</p>
<p><b>Year 6</b></p>	<p><b>Computer systems &amp; networks</b> <b>Communication</b> Learners will learn how we find information on the World Wide Web, through learning how search engines work.</p> <p><b>Online safety</b> <b>Idcision: Making friends online</b> Learners list the key applications that we may use now and in the future; know and understand why some applications have age restrictions.</p> <p><b>Creating Media</b> <b>Web page creation</b> Introduces learners to the creation of websites for a chosen purpose. <a href="https://classroom.thenational.academy/units/web-page-creation-0205">https://classroom.thenational.academy/units/web-page-creation-0205</a></p>	<p><b>Online safety</b> 7<sup>th</sup> February Safer Internet Day (theme to be confirmed)</p> <p><b>Data and Information</b> <b>Spreadsheets</b> Introduces the learners to spreadsheets</p>	<p><b>Computer systems &amp; networks</b> <b>Communication</b> Learners will investigate different methods of communication, before focusing on internet-based communication.</p> <p><b>Online safety</b> <b>Idcision: Making friends online</b> Learners identify ways to keep themselves and others safe in a range of situations online and offline; recognise that people may not always be who they say they are online.</p> <p><b>Programming</b> <b>Variables in games</b> Learners explore the concept of variables in programming through games</p>