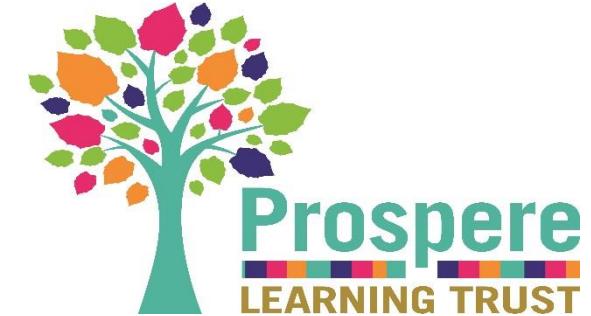


# Computing and Technology



The areas of development are:	Solutions
<b>Computing</b>	
<ul style="list-style-type: none"><li>• Understanding phishing scams and the potential threats these cause to security</li><li>• Describing the terms cyberbullying and trolling</li></ul>	<ul style="list-style-type: none"><li>• Explore <a href="#">Internet and Communication</a> techniques using BBC Bitseize</li></ul>
<ul style="list-style-type: none"><li>• Describing the positive and negative effect of social media on how we communicate</li><li>• Recognising the impact of censorship and surveillance</li></ul>	<ul style="list-style-type: none"><li>• Explore <a href="#">Think U Know</a> website for advice and support as well as definitions of cyberbullying and trolling</li><li>• Research the STOP, SPEAK, SUPPORT campaign on BBC <a href="#">Own It</a> website</li></ul>
<ul style="list-style-type: none"><li>• Explain how to keep information private on the internet</li></ul>	<ul style="list-style-type: none"><li>• Watch the video on BBC <a href="#">Own It</a> and consider all of the top tips for healthy use of social media</li></ul>
<ul style="list-style-type: none"><li>• Describing the various types of business and business ownership</li><li>• Understanding this links between technology and business and the importance of this as a communication tool</li></ul>	<ul style="list-style-type: none"><li>• OCR revision guide for Computer Science: Censorship and Surveillance – Page 26</li><li>• Explore the range of Business ownership types by looking at <a href="#">Business Ownership</a> on BBC Bitesize</li></ul>
<ul style="list-style-type: none"><li>• Being able to use spreadsheet to use a range of formulae in order to present data</li><li>• Being able to use presentation software in order to graphically present information and data to other users</li></ul>	<ul style="list-style-type: none"><li>• Revise and study effective communication within an organisation and externally. Looking at <a href="#">Communication</a> through BBC Bitesize</li><li>• Study <a href="#">Spreadsheets</a> on BBC Bitesize</li><li>• Revise <a href="#">Graphics Software</a> by studying further information on BBC Bitesize</li></ul>

<ul style="list-style-type: none"> <li>• Recognising the various types of networks (local area networks and wide area networks) including wired and wireless network types</li> <li>• Recalling and selecting appropriate network topologies</li> <li>• Understand the principles of Binary numbers and Denary numbers, knowing how to convert these (Binary to Denary and Denary to Binary)</li> <li>• Describing how binary is used to represent data in computers</li> <li>• Converting 8-bit binary numbers to denary numbers</li> <li>• Converting denary numbers to 8-bit binary numbers</li> <li>• Understanding Logic gates (NOT, AND, OR) and the building blocks of these</li> <li>• Explaining the four cornerstones of computational thinking; algorithms, abstraction, decomposition and pattern recognition</li> <li>• Being able to identify the different data types and explain what each represents (String, Integer, Float, Boolean)</li> <li>• Understanding 3 of the 4 main constructs of programming; Sequence, Selection and Iteration (if statements and loops)</li> <li>• Creating variables in Python</li> <li>• Identifying and correcting syntax errors in Python</li> </ul>	<ul style="list-style-type: none"> <li>• Revise and study networks focussing on <a href="#">Introduction to Networks</a> on BBC Bitesize</li> <li>• BBC Bitesize: <a href="#">Network Types and Topologies</a></li> <li>• Learn how text, images and sound are converted into Binary so they can be processed by a computer and how images and sound are compressed to create smaller file: <a href="#">Representing text, images and sounds</a></li> <li>• BBC Bitesize: <a href="#">Introducing Binary</a></li> <li>• Revise Binary and Conversions using the following quizzes and worksheets on <a href="#">Doodle</a>: Understanding Binary Presentation; Converting to Binary document; Binary and Hexadecimal mini quiz</li> <li>• Revise Binary and Conversions using the following quizzes and worksheets on <a href="#">Doodle</a>: Understanding Binary Presentation; Converting to Binary document; Binary and Hexadecimal mini quiz</li> <li>• Study and revise <a href="#">Logic Gates</a> and how to create a Truth Table understanding the differences between them</li> <li>• Revise and study <a href="#">Computational Thinking</a> in relation to algorithms, abstraction, decomposition and pattern recognition</li> <li>• Revise and Develop your understanding of Boolean logic using BBC Bitesize: <a href="#">Understanding Boolean</a></li> <li>• Revise and study <a href="#">Programming Constructs</a> relating to Sequence, Selection and Iteration (if statements and loops)</li> <li>• Explore <a href="#">Python</a> website to revise variables types</li> <li>• Explore the Python tutorials on <a href="#">Codecademy</a> website</li> <li>• Revise basic syntax errors on <a href="#">Tutorials Point</a> website</li> <li>• Explore the Python tutorials on <a href="#">Codecademy</a> website</li> </ul>
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