

Curriculum Area: Year 9 Computing

2017/2018

| Topics | Year Curriculum | How you can support learning at home, eg. books, websites, family learning through visits |
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| <p>Understand how sounds can be manipulated digitally in the form of binary digits.</p> <p>Use logical reasoning to compare the utility of alternative algorithms for the same problem.</p> <p>Explain how sound is converted from analogue to binary.</p> | AP1 | <p>Computer Science Website from BBC introduces the topics which we will be covering in Y7.</p> <p>Please encourage your students to understand the main elements.</p> <p>http://www.bbc.co.uk/education/subjects/z34k7ty</p> |
| <p>Use an appropriate data structure in a program.</p> <p>Introduction to algorithms.</p> <p>Understand that an algorithm can be displayed as flow charts and pseudo code.</p> | AP2 | <p>Computer Science Website from BBC introduces the topics which we will be covering in Y7.</p> <p>Please encourage your students to understand the main elements.</p> <p>http://www.bbc.co.uk/education/subjects/z34k7ty</p> |
| <p>Introduction to textual based programming language.</p> <p>Use of scratch to compare similarities between both graphic/ text language</p> <p>Understand how to develop simple programmes</p> | AP3 | <p>Computer Science Website from BBC introduces the topics which we will be covering in Y7.</p> |

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| <p>Understand uses of Boolean logic in circuits and create truth tables for single gates.</p> <p>Understand the internal computer components of a computer system.</p> <p>Describe how internal components of a computer system communicate with one another.</p> | AP4 | <p>Computer Science Website from BBC introduces the topics which we will be covering in Y7.</p> <p>Please encourage your students to understand the main elements.</p> <p>http://www.bbc.co.uk/education/subjects/z34k7ty</p> |
| <p>Design digital artefacts with appropriate validation routines to ensure trustworthiness of data.</p> <p>You can explain how digital certificates and digital signage provide information about trust worthiness.</p> <p>You can explain the importance of validating all data.</p> | AP5 | <p>Computer Science Website from BBC introduces the topics which we will be covering in Y7.</p> <p>Please encourage your students to understand the main elements.</p> <p>http://www.bbc.co.uk/education/subjects/z34k7ty</p> |
| <p>E-Safety</p> <p>You can explain how to protect online identity and privacy on a range of platforms.</p> <p>You understand the dangers of social media.</p> <p>You understand how to keep data safe online.</p> | AP6 | <p>Computer Science Website from BBC introduces the topics which we will be covering in Y7.</p> <p>Please encourage your students to understand the main elements.</p> <p>http://www.bbc.co.uk/education/subjects/z34k7ty</p> |