|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Theme | What students will learn | Key assessment | How you can support your child |
| 1 | Introduction to computing | Students will learn how to use ICT safely and responsibly | Produce a presentation on safe use of ICT and a short multiple choice assessment | Discuss how to use the Internet safely, e.g. what sites to use, how to recognise suspicious emails or how to create suitable passwords. |
| 2 | Programming | Students will be introduced to programming through scratch and the Python programming language | Produce a game/animation in Scratch and a program in Python. | There are many online resource, scratch can be used at <https://scratch.mit.edu/>.The development tool for Python can be downloaded from <https://www.python.org/> . This website is aimed at more experienced programmers but does contain a range of resources. Students can also access tutorials at <https://www.codecademy.com/> . |
| 3 | Spreadsheet modelling | Students will learn how to make spreadsheet to answer what if? questions | Create a spreadsheet to solve a what if? question | Provide access to office applications, such as Microsoft Office, Google Docs, Apple Numbers or Open Office. All of these are inter-compatible. |
| 4 | Graphic design | Students will learn about graphic design and use, using Photoshop | Create a graphical design for a digital product | Students can practise their graphic skills using <http://www.onlinephotoshopfree.net/> . There are also numerous Photoshop tutorials on the Internet. |

Year 7

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Theme | What students will learn | Key assessment | How you can support your child |
| 1 | Introduction to computer hardware and software | How computer software and hardware work | Test on key concepts of hardware and software | Deconstruct an old computer at home. Install software on home computer. Install printers and external devices to home computer. |
| 2 | Programming | How to use Flow Chart to program real world IT systems, e.g. Traffic lights, and how to use Python to create programs | A set of flow charts and a program in Python | The development tool for Python can be downloaded from <https://www.python.org/> . This website is aimed at more experienced programmers but does contain a range of resources. Students can also access tutorials at <https://www.codecademy.com/> . |
| 3 | Databases | How to create and use databases in database application software | Create a database to solve a given data storage need | Provide access to office applications, such as Microsoft Office, Google Docs, Apple Numbers or Open Office. All of these are inter-compatible. |
| 4 | Website design | How to create a set of webpages using an online design tool | Design and create an effective website | Internet access, discuss what makes a good vs bad website. |

Year 8

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Theme | What students will learn | Key assessment | How you can support your child |
| 1 | Programming | Design concepts, e.g. pseudo-code and abstraction and more advanced programming skills in the Python language  | Create a program and a short test on programming concepts | This assessment is aligned with the GCSE in Computing, if students are keen to study the GCSE supporting them with revision for the test will be important. <http://www.bbc.co.uk/education/topics/zq6hvcw> provides a link to the key concepts for the test.The development tool for Python can be downloaded from <https://www.python.org/> . This website is aimed at more experienced programmers but does contain a range of resources. Students can also access tutorials at <https://www.codecademy.com/> . |
| 2 | Business project | How to manipulate and store financial data in a spreadsheet. | Plan a project and create a spreadsheet system for a given problem | Provide access to office applications, such as Microsoft Office, Google Docs, Apple Numbers or Open Office. All of these are inter-compatible. |
| 3 | Data manipulation and capture | The nature of data, data capture techniques, data manipulation and data analysis | A report analyse data captured within a project | Provide access to office applications, such as Microsoft Office, Google Docs, Apple Numbers or Open Office. All of these are inter-compatible. |
| 4 | Creative design project  | How to use ICT to create an animation, film, dynamic website or phone app | To create an ICT generate resource to a given brief | Internet access, use of personal digital devices to capture audio and/or video |

Year 9