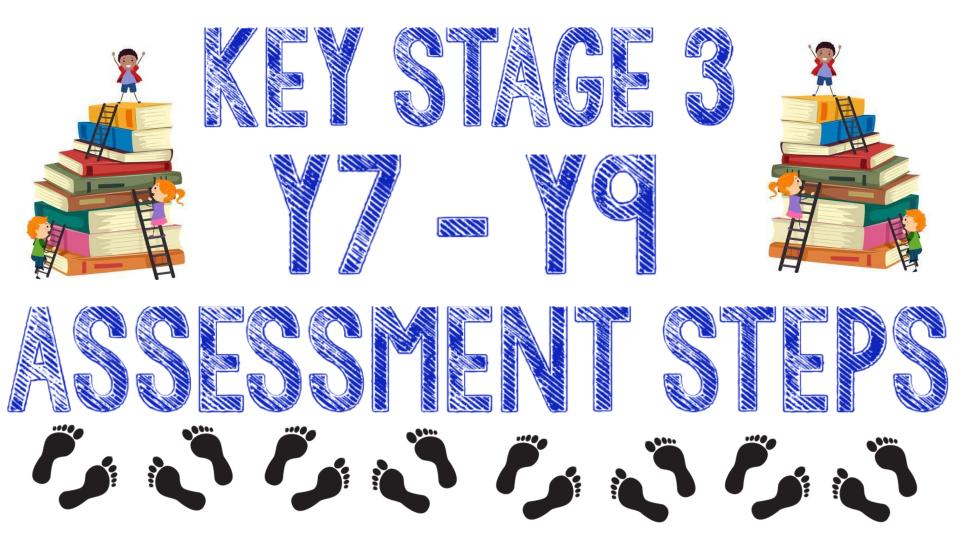
Computing



| Key Stage 3 Descriptors | Key Knowledge Skills and Understanding for Key Stage 3 What do students know and what can they do? | | |
|---|---|--|--|
| Key St Descr | Computer Science | IT | Digital Literacy |
| - Excelling + (Projected Grade 9 at GCSE) | Pupils are able to demonstrate an exceptional understanding of the underlying principles of computer science including data representation and algorithms. Pupils are able to use their computational thinking skills to solve problems using 2 programming languages independently (Inc. a text based language). Pupils are able to demonstrate an exceptional understanding of computer systems including the systems architecture, and computer networks. Pupils can confidently demonstrate their understanding of how the components work together. | Pupils demonstrate a vast amount of practical IT skills across many applications that are utilised independently to undertake creative projects. Pupils are able to use a range of Microsoft Office software for their intended purposes, using a variety of advanced features independently. Pupils demonstrate exceptional understanding of a range of ethical issues linked to computer science and AI. | Pupils are able to use the school network and software effectively using a variety of advanced skills independently. Pupils can discuss confidently safe practices online, and demonstrate exceptional understanding of the potential risks that come with using technology. Pupils have an exceptional understanding of technological advances and the impact of such technologies on their surrounding world. |
| - Mastering + (Projected Grades 6 - 8 at GCSE) | Pupils are able to demonstrate a highly developed understanding of the underlying principles of computer science including data representation and algorithms. Pupils are able to use their computational thinking skills to solve problems using 2 programming languages independently (Inc. a text based language with support). Pupils are able to demonstrate a highly developed understanding of computer systems including the systems architecture, and computer networks. | Pupils are able to confidently demonstrate practical IT skills across several applications that are utilised independently to undertake creative projects. Pupils are able to use a range of Microsoft Office software for their intended purposes, using a variety of advanced features with support. Pupils are able to use a range of apps and features of Office 365 and Teams. | Pupils are able to use the school network and software effectively using a variety of advanced skills independently. Pupils can discuss confidently safe practices online. Pupils demonstrate a highly developed understanding of the potential risks that come with using technology. Pupils can discuss the impact of a range of potential risks. Pupils have a highly developed understanding of technological advances and the impact of such technologies on their surrounding world. |

| Key Stage 3 Descript | Descriptors of Key Knowledge Skills and Understanding for Key Stage 3 What do students know and what can they do? | | | |
|--|--|--|---|--|
| Sta De | Computer Science | IT | Digital Literacy | |
| - Securing + (Projected Grades 3 - 5 at GCSE) | Pupils are able to write simple algorithms to solve simple problems. Pupils can produce simple programs using a block based programming language Produce simple programs with a high level language with support. Pupils are able to describe some understanding of the key components of a computer. | Pupils demonstrate practical IT skills that are used correctly across many applications to undertake creative projects with support for more advanced features. Pupils are able to use some Microsoft Office software for their intended purposes, using a variety of features with support to produce intended outcomes. | Pupils are able to use the majority of features on the school network without support. Pupils can demonstrate knowledge of effective safe practices online, and demonstrate some understanding of the potential risks that come with using technology. Pupils have an understanding of some of technological advances and how they could impact their lives with consideration of others with guidance. | |
| - Developing + (Projected Grades 1 – 2 at GCSE) | Pupils can create basic algorithms for computer based problems with support. Pupils can produce simple programs using a block based programming with support. language and produce simple programs with a high level language with support. Pupils are able to identify the key components of a computer. | Pupils demonstrate some practical IT skills across different applications that are utilised with support to undertake creative projects. Pupils are able to use some Microsoft Office software for their intended purposes, using a variety of features with support. | Pupils are able to use the basic features of the school network independently and utilise other features with support. Pupils are able to describe how to stay safe when they are using the internet, and can identify some potential risks. Pupils can name different technologies and explain their uses in the real world | |
| - Emerging + (Below GCSE Grading) | Pupils are able to write simple algorithms for everyday problems with support. Pupils can produce simple programs using a block based programming language with support. Pupils are able to articulate some understanding of the key components of a computer. | Pupils are able to use basic IT skills with support to undertake creative work on a computer. Pupils are able to identify different Microsoft Office software, and using some features with support. | Pupils are able to use the basic features of the school network independently Inc. logging in/out and saving/accessing work. Pupils can state the general advice and good practice to stay safe when using social media. Pupils can name different technologies. | |