

KS3 Learning Intentions

Year 7 – Half term 2 Computer Hardware What? When? Why?	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Weeks 1 - 6	<p>Understand what a computer is and how they can come in various forms.</p> <p>Understand how computers receive commands and data.</p> <p>Understand what 'processing' means.</p> <p>Understand how computers can output information.</p>	<p>Remember what a computer is and how it processes inputs to produce outputs.</p> <p>Understand that a computer is made up of a range of components.</p> <p>Understand the purpose / function of these components.</p> <p>Understand their relative importance.</p>	<p>Remember that a computer is made up of a range of components and remember their purpose / function.</p> <p>Understand the role of the CPU, RAM, and Hard Drive.</p>	<p>Understand how the CPU, RAM, and Hard Drive work together.</p> <p>Understand how the input and output devices work with the CPU.</p>	<p>Remember the role of the CPU, RAM, and Hard Drive.</p> <p>Remember how the CPU, RAM, and Hard Drive work together.</p>	<p>Understand what the CPU is, how it works and how its performance is measured.</p>

KS3 Short-term planning

Year 8 – Half term 2 Binary Bits & Bobs What? When? Why?	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Weeks 1 - 6	<p>Understand the binary number system.</p> <p>Understand why it is important in computing.</p>	<p>Remember how the binary number system works.</p> <p>Understand how to add binary number together.</p>	<p>Remember how the binary number system works.</p> <p>Understand that computers only know binary.</p> <p>Understand that in a computer system, characters are represented by binary numbers.</p>	<p>Remember that everything thing the computer represents (numbers, characters, images, sound) is done so with binary.</p> <p>Understand that bitmap images are made up of pixels.</p> <p>Understand how binary is used to represent shades and colours of images – and therefore used to represent images.</p>	<p>Understand that sound is represented by binary numbers in a computer system.</p> <p>Understand the process of sampling.</p>	<p>Understand that digital processing is the process of applying mathematical calculations on the binary values which represent the recorded sound.</p>

KS3 Short-term planning

Year 9 – Half term 2 Computer Networks What? When? Why?	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Weeks 1 - 6	<p>Understand what a network is.</p> <p>Understand the difference between a home and school network.</p> <p>Identify the network hardware required to set up a home and school network.</p>	<p>Understand what advantages and disadvantages networking brings.</p> <p>Understand the potential security issues when installing and using networks.</p>	<p>Understand the devices needed to produce a computer network.</p> <p>Understand how to increase capacity and improve the efficiency of a network.</p>	<p>Understand the difference between a Local Area Network and a Wide Area Network.</p> <p>Identify examples of both LAN and WAN networks.</p>	<p>Understand what the internet is.</p> <p>Understand the difference between the internet and the WWW.</p>	<p>Understand how data travels around the internet.</p> <p>Understand data packets and how data is sent across the internet.</p>