

# Home-School Learning Collaboration – Computing

<b>Topics in this cycle:</b> Computer evolution	<b>Taught:</b> Autumn 1	<b>Year Group: 8</b>
Key knowledge/concepts to be learnt ('Tell me about....')		Websites/blogs/YouTube links and further reading to deepen and consolidate learning
<ul style="list-style-type: none"> <li> <b>What is Computer Evolution?</b>  Identify the different changes that have taken place in the evolution of computers.  Describe how computer evolution has happened.  Explain how the evolution of computers can benefit us in real world settings. </li> <li> <b>What is Binary system and Colossus?</b>  Identify the difference between Binary and Colossus.  Describe why a computer only use binary data.  Explain how colossus uses binary to represent data. </li> <li> <b>What is Moore's Law?</b>  Describe what is Moore's Law.  Explain how Moore's Law has impacted computer evolution.  Explain the how has Moore's impacted on the way that we use computers. </li> <li> <b>What is the Internet?</b>  Identify the different web browser that is used to access the Internet.  Describe what is the Internet.  Explain what we use the Internet for. </li> <li> <b>Changes in computer over time?</b>  Identify the different cultural changes in the evolution of computers.  Describe the environmental changes in computer evolution.  Explain the ethical issues in the evolution of computer. </li> </ul>		<b>Notes/Information</b>  Computer Evolution <a href="#">History of Computers   From 1930 to Present - YouTube</a>  Binary and Colossus <a href="#">Colossus: Creating a Giant - YouTube</a>  Moore's Law <a href="#">What is Moore's Law? [Explained] - YouTube</a> <a href="#">Moore's Law - YouTube</a>  The Internet <a href="#">What is the Internet? - YouTube</a>  Changes in computers over time <a href="#">The impact of computer science technologies - Ethical, legal and environmental impacts of digital technology – BBC Bitesize – KS3</a>  <b>Videos</b> History and evolution of computers <a href="#">Evolution of COMPUTER 1930 To 2021    The Untold History of the COMPUTERS - YouTube</a>

# Home-School Learning Collaboration – Computing

Key Vocabulary and Definitions To Be Learnt		What Will The Assessment Look Like?
<b>Evolution</b>	The process of developing by gradual changes.	<b>Extended writing</b> – The use of Colossus the world's first computer.  <b>End of Unit test:</b> 35 minutes/25 marks <ul style="list-style-type: none"> <li>• Short answer questions</li> <li>• Extended writing</li> <li>• 3 marks for SPAG</li> </ul>
<b>Computer</b>	Are electronic devices that accept data (input), process that data, produce output, and store (storage) the results.	
<b>Data</b>	Is a sequence of bits (binary digits) with a value of one or zero	
<b>Binary</b>	Number system that only uses two digits: 1 and 0.	
<b>Transistors</b>	A transistor is a semi-conductor that amplifies a signal from a sensor - it is like a small electronic switch.	
<b>Valves</b>	Vacuum/Valves tubes contain electrodes for controlling electron flow and were used in early computers as a switch or an amplifier.	
<b>Internet</b>	A computer network that connects computers worldwide.	<b>Family Learning Opportunities</b>  Create a time line with the different changes in computers evolution from 1930's to present with your family. <div data-bbox="1585 826 1998 1002"> </div>
<b>LAN</b>	Local Area Network - is a collection of devices connected together in one physical location, such as a building, office, or home.	
<b>WAN</b>	Wide Area Network - is a collection of local-area networks (LANs) or other networks that communicate with one another	
		Devise a quiz on the different stages of computer evolution and test your family.