


Y9 Home Learning Computer Science

For the next set of lessons you will be completing the **Networks** unit and then beginning the lessons on the **History of Computing** unit, all the required resources (lesson PowerPoints and worksheets) have been shared with you on OneDrive. All the tasks are explained for you on the PowerPoints and worksheets.

Stick to your timetable – each week you should complete the lessons and the relevant worksheets as outlined in the plan below and make sure you stay on top of the work, as this is a vital topic for Computer Science.

If you need help on any of the tasks email Mrs Bascombe-Price and once you have completed a lesson, email the completed worksheet to Mrs Bascombe-Price.

Home Learning Week	Extended Learning Project – How a Computer Works Networks	Student to tick when complete
1 Week Beginning 23 rd March	Do some research and create a detailed written guide for the Year 6 students to help them understand how a computer works.– The guide can be produced in whatever format you wish, but higher marks will be awarded for being imaginative and creative.– You can create your guide using whatever software you wish; however, you should also try and print and hand in a hard (paper based) copy.– The guide should be easy for the Year 6 students to use and understand and include key vocabulary that they would need to learn and clear visual explanations, such as diagrams and/or real life pictures.–	
2 Week Beginning 30 th March	The guide should be easy for the Year 6 students to use and understand and include key vocabulary that they would need to learn and clear visual explanations, such as diagrams and/or real life pictures.– DEADLINE – ALL COMPLETED PROJECT WORK TO BE EMAILED TO YOUR TEACHER BEFORE FRIDAY 24th APRIL	
3 Week Beginning 20 th April	Lesson 1 – The Internet Read through the PowerPoint and make notes. Complete all tasks on the Lesson 1 worksheet Lesson 2 – Connectivity Read through the PowerPoint and make notes. Complete all tasks on the Lesson 2 worksheet DEADLINE – ALL COMPLETED WORKSHEETS TO BE EMAILED TO MRS BP BEFORE 3PM ON FRIDAY 24th APRIL	

<p>4 Week Beginning 27th April</p>	<p>Lesson 3 – LANs and WANS Read through the PowerPoint and make notes Complete the Lesson 3 worksheet Complete the tasks on the worksheet Lesson 3 – Designing a Network</p> <p>Lesson 4 – Network Topologies Complete the tasks outlined on the PowerPoint. Make sure you attempt the plenary exam style questions</p> <p>DEADLINE ALL COMPLETED WORK TO BE EMAILED TO MRS BP BY 3PM FRIDAY 1st MAY</p>	
<p>5 Week beginning 4th May</p>	<p>Lesson 5 – Client-Server Read through the lesson PowerPoint and make notes (your notes should include the following:</p> <ul style="list-style-type: none"> • The difference between client server and peer to peer networks, • The advantages and disadvantages associated with client server and peer to peer networks • An explanation of what cloud computing is • How cloud computing is accessed • The advantages and disadvantages of using cloud computing <p>Read through the scenarios and write a paragraph for each advising whether cloud computing should be used – make sure you explain your answer.</p> <p>Lesson 6 – Encryption Complete the starter task on the lesson worksheet (Lesson 6 Encryption) – using the hieroglyphics to help crack the code Use the lesson PowerPoint to help you answer the questions on the worksheet. Complete the encryption tasks on the PowerPoint and worksheet</p> <p>DEADLINE ALL COMPLETED WORK TO BE EMAILED TO MRS BP BY 3PM FRIDAY 8th MAY</p>	
<p>6 Week Beginning 11th May</p>	<p>You should use both lessons this week to complete the Networks Research Project. Follow the instructions and assessment criteria on the handout, but the aim of the project is to help you build and develop skills in research and networking:</p> <ul style="list-style-type: none"> • Understand different networks • Show how networks work • Identify different mobile devices and how they work 	

	DEADLINE ALL COMPLETED WORK TO BE EMAILED TO MRS BP BY 3PM FRIDAY 15th MAY	
	History of Computing Unit - all the required resources (lesson PowerPoints and worksheets) have been shared with you on OneDrive. All the tasks are explained for you on the PowerPoints and worksheets.	
7 Week Beginning 18th May	<p>Lesson 1 Alan Turing Read through the lesson PowerPoint and make detailed notes. Complete the tasks on the Lesson 1 worksheet</p> <ul style="list-style-type: none"> • Explain who the man shown is and why he was so important. • Use the key provided to solve some Pig Pen codes. • Use Caesar shift encryption to crack the secret messages provided. <p>Lesson 2 Tim Burners-Lee Read through the lesson PowerPoint and make detailed notes. Complete the task outlined on the Lesson 2 worksheet. Answer the following questions:</p> <ol style="list-style-type: none"> 1) Who was Sir Tim Berners-Lee and what did he invent? 2) How does the World Wide Web differ from the Internet? 3) What would the world be like if he had not given the WWW as a gift to humanity (made it free)? How different would our lives be? <p>Present your answers in a fact file about Sir Tim, you can present this fact file in any way you choose e.g. Word document, PowerPoint, simple webpage, be as creative as possible.</p> <p>DEADLINE ALL COMPLETED WORK TO BE EMAILED TO MRS BP BY 3PM FRIDAY 22nd May</p>	
8 week beginning 1st June	<p>Lesson 3 George Boole and logic gates Read through the lesson PowerPoint and make detailed notes. Complete the logic gate tasks on the Lesson 3 worksheet</p> <p>Lesson 4 Charles Babbage Read through the lesson PowerPoint and make detailed notes. Complete the Lesson 4 worksheet tasks on Charles Babbage, Problem Solving and Sorting Algorithms</p> <p>DEADLINE ALL COMPLETED WORK TO BE EMAILED TO MRS BP BY 3PM FRIDAY 5th June</p>	