



MAGHULL HIGH SCHOOL – CURRICULUM MAP

Unit: 1.2 memory and Storage	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
<p>LESSON TOPIC QUESTION(S)</p>	<p>Lesson 1 Why must data be stored in binary format?</p> <p>Lesson 2 What are the different file sizes?</p> <p>Lesson 3 Storage medium</p>	<p>Lesson 4 What How do I calculate the size of sound?</p> <p>Lesson 5 How do I calculate the sound of images and text files?</p>	<p>Lesson 6 Can I answer past exam questions about file calculations?</p> <p>Lesson 7 How can I convert denary to binary?</p> <p>Lesson 8 How can I convert binary to denary?</p>	<p>Lesson 9 How do I calculate binary shift?</p> <p>Lesson 10 What is hexadecimal?</p>	<p>Lesson 11 How do I add 2 binary integers together?</p> <p>Lesson 12 Interim recall check – Published past questions (exam board exam generator)</p> <p>Lesson 13 What misconceptions do I have?</p>	<p>Lesson 14 Sub topic – characters. What is a character set?</p> <p>Lesson 15 How are images represented in binary?</p>	<p>Lesson 16 How is sound stored in digital form?</p> <p>Lesson 17 What is compression?</p>
<p>Knowledge & Skills development</p>	<p>Theory Knowledge Mathematical calculations (non calculator) Understand how file sizes impact, e.g., mobile phone tariffs, streaming, application performance</p>			<p>Digital Skills <i>Be able to work with multiple windows</i> <i>Be able to access Teams and complete work</i> <i>Be able to access the MS365 suite of apps</i> <i>Use common shortcut keys</i> <i>Research and development of solutions to problems</i> <i>Recall</i></p>			
<p>Assessment / Feedback Opportunities</p>	<p>Formative Assessment Class activity Class Discussion Questioning pupils Verbal Feedback Live Marking</p>			<p>Summative assessment Practice assessments Cumulative testing Published past questions (exam board exam generator)</p>			
<p>Key Vocabulary</p>	<ul style="list-style-type: none"> Bit, nibble, byte, kilobyte, megabyte, gigabyte, terabyte, petabyte, binary, denary, integer, hexadecimal, ASCII, Unicode, character set, binary shift, pixels, sampling, sample rate, bit depth, hertz (Hz), analogue, compression, lossy, lossess 						

Literacy/Reading opportunities	https://www.bbc.co.uk/news/technology https://www.bbc.co.uk/programmes/m0029b3v (BBC programme - Tech Now)
Cross Curricular Themes	Development of digital skills and use of online platforms. Competence with TEAMS, OneDrive and Office365 Maths –arithmetic functions - addition, subtraction, division, multiplication
Personal Development (Including British Values, RSE, Citizenship)	C13 - diverse national, regional, religious and ethnic identities in the United Kingdom and the need for mutual respect and understanding Working with others Respectful communication
Career Opportunities	Applications developer, Data analyst, applications developer, Programmer, digital forensics, hardware engineer, software engineer, systems analyst, web developer