



ASPIRE • BELIEVE • ACHIEVE



### Curriculum Overview: Year 7 DT / Computing

Year 8 Summer Term 1 / Summer term 2		
<p>What are we learning? <u>Design &amp; Technology - Electronics</u></p>	<p>What knowledge, understanding and skills will we gain?</p> <p>Knowledge</p> <ul style="list-style-type: none"><li>• Learn about the following tools, equipment and machinery- their functions / safety:<ul style="list-style-type: none"><li>Coping Saw</li><li>Flat file</li><li>Rounded File</li><li>Scriber</li><li>Tenon Saw</li><li>Pillar drill</li><li>Wet and Dry paper</li><li>Polishing wheel.</li></ul></li><li>• Learn about LED lights, their schematic symbol, their benefits and their disadvantages.</li><li>• Learn about the unique properties and design of acrylic.</li><li>• Learn about the different between thermosetting and thermoforming plastics.</li></ul> <p>Understanding</p> <ul style="list-style-type: none"><li>• Understand how designing by hand can have limitations and using CAD is a great</li></ul>	<p>What does excellence look like?</p> <ul style="list-style-type: none"><li>• Students will annotate their designs work to describe functions, aesthetics measurements and ways of manufacturing in detail.</li><li>• Students will show knowledge and understanding of an LED from its history to common uses and commercial / domestic benefits.</li><li>• Students will use self-evaluation and peer evaluation of their design ideas and practical work to identify ways forward for development.</li><li>• Students will produce practical outcomes that are accurately cut, well finished and well presented. A high level of precision will be shown in their work.</li></ul>

	<p>skill for improving speed and accuracy of manufacture</p> <ul style="list-style-type: none"><li>• Understand how LED's are becoming an important lighting source from an environmental standpoint.</li></ul> <p>Skills</p> <ul style="list-style-type: none"><li>• Learn how to etch acrylic using templates / scribe</li><li>• Learn how to use wet and dry / buffing wheel method to polish and smooth the edge of plastics.</li><li>• Learn how to use the Tenon saw and bench hook to cut a pine block to size.</li></ul>	