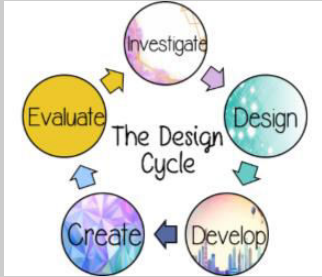


# Curriculum Narrative-

<b>Subject:</b> Design and Technology	<b>Year:</b> 7	<b>Author:</b> H.Drewery
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Key Knowledge <i>Pupils will know</i>	Key Skills <i>Pupils will be able to</i>
<p><b><u>Key Threshold Concepts:</u></b></p> <ul style="list-style-type: none"> <li>• Develop, plan, and communicate ideas</li> <li>• Work with tools, equipment, materials, and components to make quality Products</li> <li>• Know and understand materials and components</li> <li>• Evaluate processes and products</li> </ul> 	<p><b><u>Subject Skills:</u></b></p> <p>In KS3 our learners are taught to work with a wide range of materials such as wood, metal, plastic and graphic materials. They will learn new practical skills to support constructing and communicating their designs.</p> <p>The skills which are taught are based around designing and making, they include:</p> <ul style="list-style-type: none"> <li>• Health and Safety rules when using equipment and machines in a workshop environment</li> <li>• An understanding of materials and their properties</li> <li>• Accurately measuring and marking out a wide range of materials</li> <li>• Cutting and shaping of a varied range of materials, such as; wood and metal</li> <li>• Evaluating existing and self-made products.</li> </ul>

<p><b><u>Subject Specific Knowledge and Sequencing:</u></b></p> <p><b><u>KS3 all have 5 week rotations with Art, Tech, ICT, PSHE and Food</u></b></p> <p><b><u>Rotation 1:</u></b>  <b><u>Topic:</u></b> Introduction to wood and Acrylic (<b><i>Door Wedge practical</i></b>)  <b><u>Key Concepts:</u></b> Softwoods and Hardwoods  <b><u>Key Knowledge:</u></b> Safety in the workshop, types of woods, tools and equipment, Finishing techniques and quality checks.</p> <p><b><u>Rotation 2:</u></b>  <b><u>Topic:</u></b> Introduction to metal (<b><i>Candle Holder-practical</i></b>)  <b><u>Key Concepts:</u></b> Ferrous and Non-Ferrous  <b><u>Key Knowledge:</u></b> Safety in the workshop, types of metals, tools and equipment, Finishing techniques and quality checks.</p>	<p><b><u>Prerequisites and Spiral Teaching:</u></b></p> <ul style="list-style-type: none"> <li>• Students will start year 7 with no knowledge on wood or metal.... this is due to the pupils not doing design and technology at primary school</li> <li>• Students should have some skills in building structures, exploring how they can be made stronger, stiffer and more stable, this is mainly achieved through group work in primary school.</li> <li>• Students will have basic knowledge with drawing and rendering</li> <li>• In year 7 pupils will be taught basic knowledge on the following materials;           <ul style="list-style-type: none"> <li>-Wood</li> <li>-Acrylic</li> <li>-Metal</li> </ul> </li> <li>• In year 7 pupils will be taught basic knowledge on the following drawing techniques;           <ul style="list-style-type: none"> <li>-Isometric</li> </ul> </li> </ul>
	<p><b><u>Cross-Curricular Knowledge Links</u></b></p> <ul style="list-style-type: none"> <li>• <b>English-</b> Evaluating, Speaking and listening skills</li> <li>• <b>Maths-</b> Measuring skills, isometric drawings (3d</li> </ul>



	<p>shapes) analysing data</p> <ul style="list-style-type: none"><li>• <b>Science</b>- Systems &amp; Control</li><li>• <b>Art/History</b>- Design movements</li><li>• <b>Citizenship</b>- Communication skills/Teamwork</li><li>• <b>Geography</b>- Environmental impacts, Sustainability and recycling</li><li>• <b>ICT</b>- Use of Microsoft Office, Adobe Software</li></ul>
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**Reading Lists / Sources / Reading around the subject recommendations:**

- [Basic technical drawing by McGraw-Hill Education](#)
- [CGP Design and Technology Revision guide and workbook](#)
- [D&T app for smartphones](#)
- [www.bcbitesize.co.uk](http://www.bcbitesize.co.uk)
- [www.technologystudent.co.uk](http://www.technologystudent.co.uk)
- [www.ncfe.co.uk](http://www.ncfe.co.uk)
- [www.aqa.co.uk](http://www.aqa.co.uk)