

# Design Technology - LTP- SILS3 2020-2021

Year Group	Autumn Term 1 7wks	Autumn Term 2 8wks	Spring Term 1 6wks	Spring Term 2 6wks	Summer Term 1 5wks	Summer Term 2 7wks
Years 7, 8 & 9	<p><b>Designing for self</b> <i>Personalised Photo frames</i></p> <p><i>Including Health &amp; Safety</i></p> <p>Designing &amp; Producing a photo frame for themselves.</p> <ul style="list-style-type: none"> <li>• Health &amp; Safety in the workshop.</li> <li>• Introduction to hand tools.</li> <li>• Properties &amp; types of woods.</li> <li>• Wood joints (Butt, Lap joint, Mitre joint, Comb joint Extension Dovetail)</li> <li>• <b>Numeracy:</b> -               <ol style="list-style-type: none"> <li>1. Dimensioning – Correct use of rulers.</li> <li>2. Scaled drawings.</li> </ol> </li> </ul>	<p><b>Designing to a brief</b> <i>Clocks):</i></p> <p>Designing &amp; Producing a working clock for themselves or a Family member</p> <ul style="list-style-type: none"> <li>• Analysis of existing products.</li> <li>• Generating design ideas.</li> <li>• Transferring ideas to materials.</li> <li>• Templates – production unit/batch.</li> <li>• Roman numerals.</li> <li>• <b>Numeracy:</b> -               <ol style="list-style-type: none"> <li>1. Using protractors.</li> <li>2. Telling the time.</li> </ol> </li> </ul>	<p><b>Designing for end users</b> <i>Board games</i></p> <p>Design &amp; manufacture a new board game suitable for two or more players, based on a new English board game which needs to help students demonstrate their knowledge of word classes, synonyms, antonyms and develop a wider range of vocabulary.</p> <ul style="list-style-type: none"> <li>• Board games timeline.</li> <li>• Analysis of existing board games.</li> <li>• Understanding types of board games. (Strategy, Chance, Combined)</li> <li>• Introduction to CAD/CAM</li> <li>• Cross- curricula (English &amp; DT)</li> <li>• <b>Numeracy:</b> -               <ol style="list-style-type: none"> <li>1. Efficient use of resources – Tessellation.</li> </ol> </li> </ul>	<p><b>Designing to a brief</b> <i>Point of Sale (POS):</i></p> <p>Design and development of a Point of Sale for their board game or a scent (Perfume/aftershave) of their choice.</p> <ul style="list-style-type: none"> <li>• Importance of branding.</li> <li>• Logos</li> <li>• Fonts</li> <li>• Photo manipulation – Photoshop or equivalent.</li> <li>• <b>Numeracy:</b> -               <ol style="list-style-type: none"> <li>1. Efficient use of resources –</li> <li>2. 2D to 3D transformations.</li> <li>3. Development nets.</li> </ol> </li> </ul>	<p><b>Designing for end users</b> <i>Desk/Task Light</i></p> <p>Influential Designers Working drawings Design movements e.g. Art Deco</p> <ul style="list-style-type: none"> <li>• Force &amp; Motion Levers (Classes &amp; applications)</li> <li>• Mechanisms (Rotary, Linear,</li> <li>• Basic Electronics.</li> <li>• Energy efficiency.</li> <li>• Electrical safety.</li> <li>• Conductors/ Insulators</li> <li>• Five R's – Recycle/Refuse/Reuse/Reduce/Rethink</li> <li>• Sustainability</li> <li>• Finishing techniques – Varnishes / Paints / Waxes etc.</li> <li>• <b>Numeracy:</b> -               <ol style="list-style-type: none"> <li>1. Resistor colour coding.</li> <li>2. Adding resistors in Series and parallel.</li> </ol> </li> </ul>	<p><b>Designing to a brief</b> <i>Body adornment</i></p> <p>Influential Designers Working drawings Computer Aided Designing / Computer Aided Manufacturing CAD/CAM</p> <ul style="list-style-type: none"> <li>• Materials – Metals – Ferrous/Non-Ferrous</li> <li>• Manufacturing processes: - Calendaring/Extrusion/ Casting etc.</li> <li>• 5R's (Reuse, Rethink, Refuse, Recycle, Reduce)</li> <li>• Realisation</li> <li>• Evaluation</li> <li>• <b>Numeracy:</b> -               <ol style="list-style-type: none"> <li>1. Efficient use of resources – Tessellation.</li> <li>2. Scale drawings</li> </ol> </li> </ul>