

DESIGN TECHNOLOGY – Curriculum implementation			
Year 7 1 - Key ring 2 – Basic Electronic Torch & Technical drawing 3 – Textiles Body adornment	Year 8 Light-up Picture Frame. <i>Students will spend 7-8 weeks studying DT during year 8</i>	Year 9 1 – Mechanisms Cam operated Toy Extension – Wind power and linkages. <i>Students will spend 7-8 weeks studying DT during year 9</i>	KS4 Year 10
We do this because....			
<ul style="list-style-type: none"> <li>– Introduce pupils to the concept of Health and Safety.</li> <li>– Pupils have very little DT experience at Primary School</li> <li>– To introduce pupils to the ‘Design Process’ e.g. Research, design etc.</li> <li>– Make pupils aware of the influence of other designers e.g – Celeste Mogador (3)</li> <li>– Promote independent and safe use of tools and materials.</li> <li>– Pupils need to know the difference between ‘drawing’ and ‘designing’. Can they problem solve?</li> <li>– Promote the use of different design drawing and rendering skills that can be applied. E.G; Isometric, orthographic, perspective)</li> </ul>	<ul style="list-style-type: none"> <li>– Health and Safety – safe use of soldering equipment</li> <li>– Staff expertise; equipment; time; cost; National Curriculum.</li> <li>– Applying Knowledge and skills of electronics. Component knowledge and construction of electrical circuits.</li> <li>– Focus on ‘make’ to encourage pupils to be aware of design in the ‘real world’.</li> <li>– Learning new skills</li> <li>– X – Curricular links.</li> <li>– Product outcome.</li> </ul>	<ul style="list-style-type: none"> <li>– Increase pupil awareness of different types of motions.</li> <li>– Increase awareness of mechanisms, levers and linkages.</li> <li>– Builds on the knowledge of materials and their source and function.</li> <li>– Develops making skills, testing and prototypes of a working cam toy.</li> <li>– Develops analysis, evaluation and problem-solving skills.</li> <li>– Develops making skills.</li> <li>– Evaluates their personal choices when designing and making.</li> </ul>	<ul style="list-style-type: none"> <li>– Develop the knowledge of workshop skills.</li> <li>– Develop the use of hand tools.</li> <li>– Safe use of power tools.</li> <li>– Safe use of cutting tools.</li> <li>– Understanding of materials and their function</li> <li>– Testing of materials.</li> <li>– Joining methods.</li> <li>– Finishing techniques.</li> <li>– Hand-drawn plans, elevations, cross sections.</li> <li>– Use of 3d digital plans.</li> </ul>
It builds on prior knowledge of....			
<ul style="list-style-type: none"> <li>– Some understanding of mark-making.</li> <li>– Moving from ‘drawing’ to ‘designing’.</li> <li>– Measuring (Maths – x-curricular)</li> <li>– Problem solving.</li> </ul>	<ul style="list-style-type: none"> <li>– Problem solving.</li> <li>– Deeper understanding of the design process.</li> <li>– Health and Safety concepts.</li> <li>– X – curricular (Science – physics, concepts of circuits)</li> <li>– Designing skills</li> </ul>	<ul style="list-style-type: none"> <li>– Material sources (x-curricular – Geography, science)</li> <li>– Modelling techniques</li> <li>– Design choices</li> <li>– Health and safety – safe working practices, tool choices</li> <li>– Research and application of Knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>–</li> </ul>

How this helps what will be learnt next....

- Understanding of the design process.
- Problem solving. E.G: If a mistake is made – how can it be overcome? Can the pupil justify/explain this in subject specific terms?
- Develop independent thinking. Consider 'make problems' when designing/problem solving

- Understanding of tools and equipment.
- Understanding of subject specific language.
- Developing the knowledge base from year 7.
- Pupils can understand the concept of x-curricular links and terms to apply knowledge and discover mistakes (to be able to rectify and problem solve).
- Pupils have more independence.
- Pupils have more confidence in a workshop environment.

- Designing and modelling with restrictions and considering the impact of market choice.
- Helps to develop personal planning skills.
- Development of time management.
- Development of material availability.
- Problem solving.