

Subject:	Design Technology Intent:
<b>DESIGN</b> Technology	The aim of Key Stage 3 Design technology is to develop a trusting relationship with our students where, by the end of the key stage, they can routinely take risks or chances when designing secure in the knowledge that failure is possible but seen as positive. In this way they will reach for more challenging or risky solutions to the problems they are set. They will have been assured that they will complete increasingly complex tasks and produce an outcome of value in a range of materials, using techniques that are unique to Design Technology as well as employing those gained in other subjects particularly Science, Art, Maths, History, English, Geography, RS, ICT and PSHE.

### The Big Questions...

Year 7	Year 8	Year 9
<ul style="list-style-type: none"> <li>- <b>Name Tags:</b> How does the type of material used alter the design of a product? What tools are most effective when making a one off product? How can I draw most effectively? How can renewable resource be made into worthwhile materials?</li> <li>- <b>Phone Holder:</b> What was Art Nouveau and how did it differ from the later Art Deco in origin and in styling? What are the advantages of CAD/CAM in manufacturing? Which tools are most accurate when making in softwood. What are the essential attributes of thermoplastic polymers which make them useful?</li> <li>- <b>Homeless:</b> How many families are homeless in the UK? What are the essential requirements for a decent home? How much space does a bed/bath/cooker take up? How do I plan interior space efficiently? How to use coloured pencils? What is scale?</li> </ul>	<ul style="list-style-type: none"> <li>- <b>Electronics</b> – How does current flow in a circuit? What restricts the flow? What stores electricity? How can I solder effectively?</li> <li>- <b>Product Design</b> – What is negative space and how did CRM use it in his designs? How does the Hoover Building reflect the Art Deco style? Why Memphis? How can I use 2D Design effectively to produce a quality product using CAD/CAM?</li> <li>- <b>Cereal</b> – What is Point of Sale? What are the five basic requirements of all food packaging? How do I use Photoshop to create an industry standard packaging design? What are nets and developments really like in commercial use? What are the most common printing processes?</li> </ul>	<ul style="list-style-type: none"> <li>- <b>Jewellery Design.</b>- What is Memphis Design? Why is Phillippe Starke? What are Zaha Hadi's greatest works? Which of these designers do I prefer. How to sketch in 3D. What is the difference between Ferrous, Non Ferrous and Alloyed metals? How can I use 2D design to produce an original 3D product in Pewter? How to cast metal safely and accurately. How to “finish” metal to a mirror finish.</li> <li>- <b>Causes and Concerns</b> – How to “ speak “ in 3D. How to create shapes/forms that communicate emotion? How to develop a narrative using words and pictures. How to model in heavyweight board. Scale and simple construction. Safe use of craft knives. Using found objects in a 3D environment</li> </ul>

#### What skills will I develop?

- Above all else Design technology is a subject that develops creativity in the students who study it. You will also learn about successful designers and design movements from the last one hundred years which will put technological progress in an historical and social context. You will learn how to sketch and record ideas in a way that communicates your intentions clearly whilst also developing enhanced computer modelling and design abilities through the use of 2D design and Google SketchUp. You will learn the roles of manufacturer, designer, consumer/end user in order to become a more discerning buyer and user of artefacts. Of course you will also develop an increasing ability to make products to a very high standard of accuracy and finish.

#### What great resources can I use?

- Google Sketch Up, BBC Bitesize. Technology Student.com, Mr DT. The websites of the V+A Museum, IDE Virtual Museum and The Design Museum all have information on design precepts and designers as well as iconic products.

#### How will I be assessed?

In Year 7 your first mini project will act as a baseline assessment of your skills. In every other project you will be given a formative assessment of your progress at the mid point and a summative assessment upon completion. In every lesson you will be given feedback on your progress by the teacher.

Levels assigned lead towards the GCSE and A level descriptors but are an indication only. We expect students in Year 7 to achieve up to level 2+, in Year 9 up to level 4+.

#### Three ways that parents/carers can help...

1. Visit the Design Museum in London and the Royal College of Art Summer Show which features Product Design, Architecture, Textiles and the whole range of Design special areas.
2. Make sure your suggestions for help are accepted, two or three heads are better than one (they can ignore it later at school but will have a choice ).
3. Help students with their research effort particularly by acting as a client or end user.