

Year	Topics/Projects	Additional information	Getting the most marks	Additional resources
7	<p>During Year 7 Students will have the opportunity to complete the following projects:</p> <p>Structures and force- Team based project where students work co-operatively to produce a structure capable of holding a given weight.</p> <p>Resistant materials –</p> <p><i>Art Deco Clocks</i> – Students gain knowledge about a specific design period. Using this research they develop their own ideas into Clocks. Students then manufacture their design from plastic using basic cutting and joining techniques.</p> <p><i>Culture-</i> Students will study Islamic Art and will work with metal to produce decorative candle holders in this style.</p> <p>Resistant materials/Systems and Control – Students will work together to produce a racing car which will include simple electronics. They students will have to investigate and develop the input in order to produce a desired output.</p> <p>Graphics – students will develop drawing skills in Scaling, 3d free hand sketching, isometric and orthographic projections and flow diagrams.</p> <p>Textiles –</p> <p><i>Felt and quilting production</i> - Students will work on the production of felt and then will use their material to make embellished oven gloves.</p> <p>Food –</p> <p>Basic hygiene techniques will be explored during the first module where students will produce a range of fresh soups. Students will investigate Nutrition and health eating through the second module of food technology.</p>	<p>Key skills that students in year 7 will develop over the year will be:</p> <p>To be able to work individually and as an active member of a team.</p> <p>To be able to develop ideas from research they have gathered and justify them.</p> <p>To be able to work with a variety of hand tools and materials.</p> <p>To be able to communicate their ideas in a range of mediums – drawing, annotation, discussion, models and a variety of ICT programmes.</p> <p>To be able to identify things that are going well within their projects and areas that could be improved.</p> <p>Useful websites</p> <p>http://www.technologystudent.com/</p> <p>http://www.bbc.co.uk/schools/gcsebites/ize/design/</p> <p>http://designmuseum.org/</p>	<p>Design technology work must</p> <ul style="list-style-type: none"> • Include personal opinions • Have justifications for your ideas thoughts and the processes that you have carried out. • Show the development of an idea more than one idea • Be able to offer modifications and improvements • Be presented to the best of your ability often in a range of mediums – drawing writing CAD models. 	<p>Tools –</p> <p>Hand tools Belt Sanders Electronic equipment Vacuum formers Strip heaters Buffing wheel Pillar drill Sewing machines Kitchen appliances</p> <p>ICT-</p> <p>Cad Cam - Laser cutter PowerPoint Flow Google sketch up Comic life</p> <p>English Links -</p> <p>Key words Technical vocabulary Evaluative and persuasive text.</p> <p>Math Links –</p> <p>Measuring out materials and drawings Projecting costs of projects Isometric drawing Geometric shapes</p> <p>Science Links –</p> <p>Materials Forces Structures Electronics</p>

<p>8</p>	<p>During Year 7 Students will have the opportunity to complete the following projects:</p> <p>Structures and force- Team based project where students work co-operatively to produce a model of a specific bridge. Students then present their model to the class teaching each other about key features and uses.</p> <p>Resistant materials –</p> <p><i>Focused practical tasks – Dice and coat hook</i> – students will use a range of hand tools, templates and jigs to produce identical dice looking at batch production and control measures. Students then will work from working drawings to produce a metal coat hook. The hook will be mounted on a backboard which will have been designed and produced by the students using our CAD Cam Facilities.</p> <p>Resistant materials/Systems and Control – Students will learn about electronic components and through short focused practical tasks will develop their theory knowledge (of Motors, resistors, switches and LED's) Students will design and make a mini light as well as a steady hand game from electric components and plastic processes.</p> <p>Graphics – students will develop drawing skills in Scaling, 3d free hand sketching, presentation, paper mechanisms, isometric and orthographic projections and flow diagrams. Students will carryout product analysis exercises and will develop their own ideas into a pop-up book.</p> <p>Textiles – Mexican Day of the Dead- Students will learn a range of techniques whilst studying the Mexican day of the dead festival. These techniques will lead to a final wall hanging peice.</p> <p>Food – Bread- students will develop techniques to produce a range of breads. Looking specifically at ingredients and production methods.</p>	<p>Key skills that students in year 8 will develop over the year will be:</p> <p>To be able to work individually and as an active member of a team.</p> <p>To be able to develop ideas from research they have gathered and justify them.</p> <p>To be able to work with a variety of hand tools and materials.</p> <p>To be able to communicate their ideas in a range of mediums – drawing, annotation, discussion, models and a variety of ICT programmes.</p> <p>To be able to identify things that are going well within their projects and areas that could be improved.</p> <p>To design for an end user.</p> <p>To be able to relate the processes and designs to the real world.</p> <p>To be able to combine practical and technological skills with creative thinking.</p> <p>To analyse products to understand how they are made and how they could be improved.</p> <p>Useful websites http://www.technologystudent.com/ http://www.bbc.co.uk/schools/gcsebites/ize/design/ http://designmuseum.org/</p>	<p>Design technology work must</p> <ul style="list-style-type: none"> • Include personal opinions • Have justifications for your ideas thoughts and the processes that you have carried out. • Show the development of an idea more than one idea • Be able to offer modifications and improvements • Be presented to the best of your ability often in a range of mediums – drawing writing CAD models. • Be creative and innovative 	<p>Tools – Hand tools Belt Sanders Electronic equipment Vacuum formers Strip heaters Buffing wheel Pillar drill Sewing machines Kitchen appliances Hot glue guns Fret saws</p> <p>ICT- Cad Cam - Laser cutter PowerPoint Flow Google sketch up Comic life</p> <p>English Links - Key words Technical vocabulary Evaluative and persuasive text.</p> <p>Math Links – Measuring out materials and drawings Projecting costs of projects Isometric drawing Geometric shapes</p> <p>Science Links – Materials Forces Structures Electronics</p>
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<p>9</p>	<p>During Year 7 Students will have the opportunity to complete the following projects:</p> <p>Introduction rotation- in the first term students will rotate around the four main areas of DT on a weekly cycle. They will experience smart materials and ergonomics, produce a key ring in CAD/CAM, develop knowledge of sensory analysis in food technology and be introduced to the sewing machine.</p> <p>Cad /Cam – Students will work in teams to produce a batch of vases using CAD CAM technology.</p> <p>Resistant materials–</p> <p>Desk Tidy- Students will investigate wood – looking at joints finishes and categories. They will complete a series of short practical tasks before starting an individual desk tidy project where they will go through the whole design process.</p> <p>Light design- looking at modelling, packaging and promotion the students will design and make a working product for a specified user.</p> <p>Graphics – students will develop drawing skills in Scaling, 3d free hand sketching, presentation, paper mechanisms, isometric and orthographic projections and flow diagrams. Students will produce a range of design sheets to be kept in their green folders.</p> <p>Textiles – Graffiti Duffel Bag- students will look at graffiti and will produce their own work based on the investigations. They will use printing and sewing techniques to develop this work into a duffel bag.</p> <p>Food – A healthy plate and nutrition. – Students will learn about the importance of nutrition, the benefit of a balanced diet as well as how to prepare and cook nutritious food.</p> <p>Cultures- research into foods around the world and production of samples.</p>	<p>Key skills that students in year 9 will develop over the year will be:</p> <p>To be able to work individually and as an active member of a team.</p> <p>To be able to develop ideas from research they have gathered and justify them.</p> <p>To be able to work with a variety of hand tools and materials.</p> <p>To be able to communicate their ideas in a range of mediums – drawing, annotation, discussion, models and a variety of ICT programmes. To be able to offer peer evaluation and critical feedback to others.</p> <p>To be able to identify things that are going well within their projects and areas that could be improved.</p> <p>To design for an end user.</p> <p>To be able to relate the processes and designs to the real world.</p> <p>To be able to combine practical and technological skills with creative thinking.</p> <p>To analyse products to understand how they are made and how they could be improved.</p> <p>Useful websites http://www.technologystudent.com/ http://www.bbc.co.uk/schools/gcsebitesize/design http://designmuseum.org/</p>	<p>Design technology work must</p> <ul style="list-style-type: none"> • Include personal opinions • Have justifications for your ideas thoughts and the processes that you have carried out. • Show the development of an idea more than one idea • Be able to offer modifications and improvements • Be presented to the best of your ability often in a range of mediums – drawing writing CAD models. 	<p>Tools – Hand tools Belt Sanders Electronic equipment Vacuum formers Strip heaters Buffing wheel Pillar drill Sewing machines Kitchen appliances</p> <p>ICT- Cad Cam - Laser cutter PowerPoint Flow Google sketch up Comic life</p> <p>English Links - Key words Technical vocabulary Evaluative and persuasive text.</p> <p>Math Links – Measuring out materials and drawings Projecting costs of projects Isometric drawing Geometric shapes</p> <p>Science Links – Materials Forces Structures Electronics</p>
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