

Curriculum Overview – Design Technology Y8

| Year | Term | Units of Work | Assessment |
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| 8 | 1 | <p>Mobile Phone Stand Rationale: To introduce pupils to a number of new materials, tools, equipment and machinery used in the workshop and reinforce their understanding of those used previously. To develop pupils' ability to evaluate their work and what they have learnt.</p> <p>Pneumatics Rationale: To introduce pupils to 'pneumatics' and develop an understanding of how this technology can be used in everyday life. To develop pupils' ability to design in 2D. To develop pupils' ability to use basic tools and equipment for modelling purposes.</p> | <p>Manufacturing – Pupils must use a range of tools, equipment and machinery to make a mobile phone stand from pine and acrylic.</p> <p>Technical Understanding – Pupils must produce an information page which explains how to use the pillar drill correctly and identifies any health and safety rules that must be followed in addition to any potential hazards.</p> <p>Evaluation – Pupils must evaluate the mobile phone stand they have produced, (identifying what they learnt, found difficult and found easy) and set targets to help them improve in the future.</p> <p>Design – Pupils must produce a range of design ideas for a pneumatic rocket.</p> |

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| | 2 | <p>CAD CAM Rationale: To introduce pupils to 'CAD', 'CAM' and 'CNC'. To teach pupils how to use 2D Design to draw (in general) and how to use the laser cutter to produce practical work pieces. To develop pupils' ability to draw using isometric projection.</p> <p>Mini Light Rationale: To develop pupils' understanding of logos and packaging. To develop pupils' ability to use existing products to inspire design. To develop pupils' ability to design in 2D and use 2D Design. To develop pupils' modelling skills. To develop pupils' ability to evaluate.</p> | <p>Technical Understanding – Pupils must produce a CAD drawing of a monkey using isometric projection. They must then use CAD to render this drawing and apply 'weighted line'.</p> <p>Design – Pupils must produce a range of design ideas for a mini light.</p> <p>Manufacturing – Pupils must use a range of tools and equipment, in addition to CAD and freehand sketching, to make a mini light and packaging for it to be contained in.</p> <p>Evaluation – Pupils must evaluate the mini light they have produced, (identifying what they learnt, found difficult and found easy) and set targets to help them improve in the future.</p> |
| | 3 | <p>Eatwell Guide Rationale: To introduce pupils to the Eatwell Guide and develop safety and hygiene practice in the food rooms. To develop pupils understanding of different ingredients used to prepare and cook dishes. To develop pupils' ability to work independently and as part of a team.</p> <p>Textiles Wall Hanging Rationale: To understand how designers use a theme to develop creative ideas for products. To</p> | <p>Manufacturing – Pupils use different parts of the cooker, a range of equipment and methods to make Eve's pudding.</p> <p>Evaluation – Pupils evaluate WWW and EBI (identifying what they learnt, found difficult and found easy) and set targets to help them improve in the future.</p> <p>Technical Understanding – Pupils complete a booklet focusing on the Eatwell Guide.</p> <p>Design – Pupils produce pattern and shape designs based on a theme. They present a final design for their wall hanging.</p> |

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| | | <p>develop pupils' ability to use a variety of tools and equipment including the sewing machine safely. To introduce pupils to the method of applique, couching and use of ribbon when decorating fabric. To teach pupils about construction and making pockets.</p> | <p>Manufacturing – Pupils demonstrate their ability to control and use the sewing machine safely. They learn the method for applique, couching and applying ribbon to decorate their pocket. The wall hanging must be constructed using the sewing machine and pupils are encouraged to incorporate a variety of decorative techniques to produce a quality product.</p> <p>Evaluation – Pupils must evaluate the final wall hanging (identifying what they learnt, found difficult and found easy) and set targets to help them improve in the future.</p> |
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