



DT Curriculum Knowledge Map



Year 9

Product Design - Woodwork and Plastics	<p>Understanding a design brief and target audience, analysing designers' work, designing products to meet the brief, using technical drawing to plan their products. Drawing in isometric projection. Marking and measuring accurately.</p> <p>Cut, chisel, file, sand and varnish with precision.</p> <p>Safely using specialist machinery and equipment to accurately cut, drill, file and sand. Using acrylic cement to bond and pliers to open and close the jump rings to construct jewellery pieces</p>
Architecture and Engineering	<p>Understanding the brief, Secondary research about conditions on Mars, Problem solving and working in a team, Biomimicry, Properties of materials, CAD, Measuring skills, Spatial awareness, Model-making using foam board, cardboard, paper, paint, sticks and glue, Creating a range of nets for different 3D shapes, Presenting group idea and model to the class.</p>
Electronics & CAD	<p>Design movements(research skills), 3D drawing, CAD, Adobe Illustrator, Electronics and circuits, inputs and outputs</p>
Food Preparation: Micro and Macro Nutrients	<p>Learning about the eatwell guide in order to fully understand nutrition and why nutrients are essential for our body. Understanding food and culture from around the world by exploring a range of different ingredients and flavour profiles. How to use specialist equipment safely in order to learn how to prepare and cook a range of healthy dishes.</p>

Year 8

Textiles & Electronics	<p>Research and analysis of 3 abstract artists/designers, Drawing and collaging to generate ideas that meet the brief, Making a paper prototype, Cutting out felt shapes accurately-copying my design Sewing a circuit with conductive thread and a LED, Sewing on felt shapes, Cutting widows with a scalpel, Embroidery stitches</p> <p>Using blanket stitch to join sides together, Evaluating my project against the success criteria and design brief.</p>
Product Design - woodwork	<p>Understanding a design brief, designing a product to meet the brief and target audience, using technical drawing to plan their product. Drawing in isometric projection. Marking and measuring accurately. Cutting and sanding wood safely. Considering finishes for the final product. Considering sustainable design, using design thinking.</p>
Architecture and Engineering	<p>Perspective drawing, Precision cutting, Model making, scale, slot joints & tabs, nets, TinkerCAD design</p>
Food Preparation: Foods From Around The World	<p>Understanding food and culture from around the world by exploring a range of different ingredients and flavour profiles. How to use specialist equipment safely in order to learn how to prepare and cook a range of healthy dishes.</p>

Year 7

Textiles	<p>Working with a brief, Designing a product</p> <p>Shape, Pattern, Colour, Embroidery, Threading a needle, Running stitch, back stitch, whip stitch, satin stitch</p>
Architecture and Engineering	<p>Undertaking a brief, user centred design, environmental impact, essential and desirable items for architecture and interior design, Smart Technology for the home-research and analysis, Drawing a floor plan, Scale, Digital design skills, Model making with cardboard, Slot joints, Safely using a scalpel</p>
Product Design -woodwork	<p>Understanding a design brief, designing a product to meet the brief, using technical drawing to plan their product. Drawing in 2 point perspective. Marking and measuring accurately. Cutting and sanding wood safely. Considering finishes for the final product.</p>
Food Preparation: Healthy Meals and Cooking Skills	<p>How to use specialist equipment safely in order to learn how to prepare and cook a range of healthy dishes.</p>