

# Design, Technology & Construction

Theme/Concept	KS2	Year 7	Year 8	Year 9	Year 10	Year 11	Post-16
Product	<i>Provide pupils with exposure to a broad range of appropriate products and designs to inspire and inform their own making.</i>	<b>DT Products</b> Maze Puzzle Windchime  <b>Textiles</b> Pocket Monster	<b>DT Products</b> Sweet Dispenser Insect House  <b>Textiles</b> Pocket Monster	<b>DT Products</b> Mosaic Planter Acrylic Clock  <b>Textiles</b> Pocket Monster	Stud Wall, Tilled, Painted and Decorated	Stud Wall, Tilled, Painted and Decorated	<i>Exposure to products and scenarios that solve real world problems</i>
Designing	<i>Pupils design purposeful products by generating ideas, drawing and labelling designs, and considering how their products will work and meet the needs of users.</i>	DT Use of technical drawings to inform products ACCESS FM Decorative design work  Textiles Designing using mood board, brief and spec	DT Use of technical drawings to inform products ACCESS FM Decorative design work  Textiles Designing using mood board, brief and spec	DT Design of mosaic Using ICT to design Acrylic clock 2D design ACCESS FM  Textiles Designing using mood board, brief and spec	NA - interpreting technical information	NA - interpreting technical information	<i>Developing design skills/following a brief</i>
Making	<i>Make products by selecting and using tools, equipment, and materials safely and accurately to follow their designs and create functional outcomes.</i>	<b>DT</b> Measuring, cutting, assembling, gluing, decorating. Drilling, half lap joint Clamping  <b>Textiles</b> embroidery stitches, template making, applique, attaching a button, backstitch, mattress stitch, fabric cutting	<b>DT</b> Marking out and cutting, sanding and drilling using jigs, cutting angled joints assembly  <b>Textiles</b> embroidery stitches, template making, applique, attaching a button, backstitch, mattress stitch, fabric cutting	<b>DT</b> Measure, mark out, drilling, assembling front and sides, joining and making feet, creating mosaics, electronics, working with acrylic  <b>Textiles</b> embroidery stitches, template making, applique, attaching a button, backstitch, mattress stitch, fabric cutting	Stud Wall, Joints, Tilling, Painting and Decorating	Stud Wall, Joints, Tilling, Painting and Decorating	<i>Developing making skills for constructing more complex structures and bringing designs to life.</i>
Evaluating	<i>Pupils evaluate their products by testing functionality, reflecting on successes and areas for improvement, and proposing future refinements.</i>	<b>DT</b> Evaluation of existing products ACCESS FM Evaluation of own product Reflecting on work throughout making	<b>DT</b> Evaluation of existing products ACCESS FM Evaluation of own product Reflecting on work throughout making	<b>DT</b> Evaluation of existing products ACCESS FM Evaluation of own product Reflecting on work throughout making	<i>Evaluating and reflection on built products for coursework</i>	<i>Evaluating and reflection on built products for coursework</i>	<i>Discussing the success, improvements and viability of their designs and made products, evaluating against real life problems.</i>
Theory	<i>DT theory covers materials and their properties, structures, mechanisms, electrical systems, and the design process, helping pupils understand how products work and how to improve them.</i>	<b>DT</b> Brief and spec, using and understanding technical information, drawing techniques, machines and tools, design, evaluation skills Sustainability & 6Rs, Metals and woods properties, design theory  <b>Textiles</b> H&S, textiles introduction, fibres and properties, 6Rs, design content, brief and analysis, designing, evaluating	<b>DT</b> Brief, product analysis, GANTT charts, materials used in construction of houses, cutting angled joints  <b>Textiles</b> H&S, textiles introduction, fibres and properties, 6Rs, design content, brief and analysis, designing, evaluating	<b>DT</b> H&S, Brief, spec understanding technical drawings, trades, joint types, evaluation brief, success criteria, design ideas, designing lamp  <b>Textiles</b> H&S, textiles introduction, fibres and properties, 6Rs, design content, brief and analysis, designing, evaluating	The construction sector, built environment life cycle, building types, materials, structures, sustainable methods, trades, careers, and essential health and safety knowledge for working safely in construction.	<i>Revision of all content for Exam</i>	<i>Advanced design thinking, in-depth materials and manufacturing knowledge, CAD/CAM, sustainability, and rigorous testing and evaluation to develop complex, real-world design solutions.</i>