



# Year 7



## Stationery Solutions

### The BIG Picture

**Learning Objective:** Work with a wide range of processes and materials SO THAT you develop your design, making and evaluating skills while building your technical knowledge.

- Learn technical knowledge and practical skills using specialist workshop equipment.
- Learn technical knowledge and practical skills of industrial equipment (laser cutter, sewing machine, heat press, sublimation printer)
- Learn how to use drawing skills to communicate design idea.
- Use 2D CAD to design a logo that can be manufactured using CAM machinery.
- An introduction to plastics, timbers, manufactured board, natural & synthetic fibres.




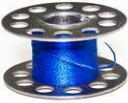











**Assessment:** During this project, you will be formally assessed on the four main stands of the national curriculum (designing, making, evaluating & technical knowledge). The assessments will be a mixture of skills based and knowledge-based tasks. You will reflect on your assessments by identifying your successes and the elements you could improve.



# Key Terminology

Design Technology Skills		Project Skills	
<ul style="list-style-type: none"> <li>● Resilience</li> <li>● Perseverance</li> <li>● Independence</li> <li>● Teamwork</li> <li>● Health &amp; Safety</li> <li>● Quality Control</li> <li>● Problem solving</li> </ul>	<ul style="list-style-type: none"> <li>● Research</li> <li>● Designing</li> <li>● Modelling</li> <li>● Making</li> <li>● Manufacturing</li> <li>● Critique</li> <li>● Analysis</li> <li>● Evaluating</li> </ul>	<ul style="list-style-type: none"> <li>● Measuring</li> <li>● Marking out</li> <li>● Cutting</li> <li>● Half lap joint</li> <li>● Drilling</li> <li>● Shaping</li> <li>● Moulding</li> <li>● Isometric drawing</li> <li>● Iterative design</li> <li>● Economical Lay Plan</li> </ul>	<ul style="list-style-type: none"> <li>● CAD / CAM</li> <li>● Threading</li> <li>● Machine Sewing</li> <li>● Resist Dyeing</li> <li>● Heat Transfer</li> <li>● Sublimation Printing</li> <li>● Pattern Cutting</li> <li>● Plain Seam</li> <li>● Hems</li> <li>● Seam Allowance</li> </ul>

## Equipment & Materials

 2D design (CAD software)	 Laser Cutter	 Heat Press	 Sewing Machine	 Bobbin
 Band Facer	 Pillar Drill	 Line Bender	 Junior Hacksaw	 Tenon Saw
 Glass paper	 Jigs	 Tri Square	 Bench Hook	 Steel rule
 Needle	 Pins	 Fabric Shears	 Pinking Shears	 Thread
 Cotton (Natural Fibres)	 Polyester (Synthetic Fibres)	 Plywood (Manufactured board)	 Pine (Softwood)	 Acrylic (Thermoforming plastic)