



Year 9 Design Technology – Product Design Curriculum Map

Overview	2 x 9 week carousel, 1 x workshop based project as well as 1 x Homework project per rotation. Key Product Design theory is taught within allocated workshop time alongside practical projects. Homework projects allow an extension to learning linked to key design knowledge.	
Year 9	First Rotation	Second Rotation
Topic	Angle Poise Lamp Project	Swivel Picture Frame Project
Knowledge	<p>Mastering: Target market Environmental and social impact Classification of levers Modelling Design movements Collection of data Clients needs Design brief Iterative process Design specification Orthographic drawing CAD/CAM design and manufacture</p> <p>Homework Project -Solving Problems 1</p>	<p>Moving forward: Target market Environmental and social impact Classification of levers Modelling Design movements Collection of data Clients needs Design brief Iterative process Design specification Orthographic drawing CAD/CAM design and manufacture</p> <p>Homework Project -Solving Problems 2</p>
Skills	<p>Classroom based skills: Analysis of lamps Product Analysis/Research of existing products Identify target market Research analysis Design specification (ACCESSFM) Initial ideas - Isometric drawings Development of modelling Make - Diary of making Evaluating Safe use of workshop equipment and hand tools Growing confidence in use of CAD/CAM design and manufacture</p>	<p>Classroom based skills: Analysis of lamps Product Analysis/Research of existing products Identify target market Research analysis Design specification (ACCESSFM) Initial ideas - Isometric drawings Development of modelling Make - Diary of making Evaluating Safe use of workshop equipment and hand tools Confident use of CAD/CAM design and manufacture</p>

Homework based skills:

Finding a problem to solve (analysis)
Solution to a problem
Design – Think creatively
Modelling Skills (3D CAM/Sketchup)
Evaluation/Feedback analysis
Iterative design process

Homework based skills:

Investigating a problem
Frequency and Impact Graph
Generating a Design Brief
Sketching ideas
Modelling (3D CAM Software)
Evaluation and Iteration process
Concept board