

Year 8 Design & Technology – Curriculum Map

Overview

Year 8 students complete two major projects across the academic year:

1. **Clock Project** – Design and manufacture an analogue clock using pine and rebate joints.
2. **Passive Amplifier Project** – Design and manufacture a passive amplifier using plywood and CAD templates.

Both projects develop skills in **designing, making, evaluating**, and applying **technical knowledge**, with emphasis on creativity, accuracy, sustainability, and safe tool use.

Curriculum Map Table

Term	Project	Focus Areas	Key Skills	Assessment
Autumn Term	Clock Project	<ul style="list-style-type: none"> - Design brief & specification - Research timbers - Analyse existing products using ACCESS FM - Develop 3D drawings (isometric & oblique) - Create and refine design ideas 	<ul style="list-style-type: none"> - Safe use of hand tools & machinery - Marking out & tolerances - Cutting, sanding, assembly using rebate joints - Finishing techniques 	<ul style="list-style-type: none"> - Quality & accuracy of finished clock - Design work - Evaluation using ACCESS FM - End-of-unit test
Spring/Summer Term	Passive Amplifier Project	<ul style="list-style-type: none"> - Design brief & mind mapping - Analyse existing products & learn 6Rs (sustainability) - Create initial ideas using 3CAVE - Develop designs through peer assessment - CAD template creation 	<ul style="list-style-type: none"> - Safe use of coping saw, files, sanding - Use of CAD for template design - Drilling and assembly - Decorative finishing 	<ul style="list-style-type: none"> - Quality & accuracy of finished amplifier - Ability to amplify sound - Evaluation using ACCESS FM - End-of-unit test

Common Threads Across Both Projects

- **Technical Knowledge:** Properties of hardwood, softwood, and manufactured boards; joints and fixings; health & safety; CAD basics.
- **Vocabulary:** Design brief, aesthetics, tolerance, rendering, annotation, sustainability, iterative design, ACCESS FM.
- **Assessment Points:** Practical quality, design creativity, evaluation depth, technical knowledge test.