

DT Year 8 Curriculum overview

The below is intended to provide parents and pupils with a simple overview of Year 8 Design Technology. Should you have additional questions please do not hesitate to contact Miss Dickson.

Learning Focus	Assessments
Unit 1: Design influences and Timber (c. 24 lessons)	
<p><u>Learning focus:</u></p> <ol style="list-style-type: none"> 1. Workshop health and safety 2. Using a design brief 3. Writing a design specification 4. Biomimicry and Biomorphic inspired design 5. Timber physical and working properties. 6. Freehand sketching to visually represent ideas. 7. Isometric projection 8. Marking out, modification and finishing of timber. 9. Workshop tools, processes, equipment, and machinery 10. Production of models/ prototypes to test idea. 11. Evaluation of outcome against criteria <p><u>Key skills:</u> Designing sustainably using timber, mood-boards for inspiration, isometric projection, hand tools and fixed machinery usage and working with timber.</p> <p><u>Knowledge revisited from year 7:</u></p> <ol style="list-style-type: none"> 1. Health and safety 2. Brief and specification 3. Sustainability 4. Paper/boards 5. Polymers 6. Sketching skills/ design principles 7. Templates and models 8. Workshop tools, techniques, processes, equipment, and machinery. 9. Evaluation 	<p>Interim Assessment: Silent starter recall will assess understanding every lesson.</p> <p>Final Unit Assessment: This will test spelling, knowledge and understanding of the learning focuses.</p> <p>Homework: Forms quiz checking knowledge and understanding of the learning focuses.</p> <p>Whole class reading: Eden by the bay and then a small label making a big impact (FSC).</p>
Unit 2: Mechanisms and Electronics (c. 12 lessons)	
<p><u>Learning focus:</u></p> <ol style="list-style-type: none"> 1. Mechanisms for movement; gears, levers, linkages, pulleys 2. Changes in movement and force 3. Types of motion; Linear, Rotary, Reciprocating and Oscillating motion 4. Advanced mechanical systems 5. Electronics for intelligence 6. Design principles <p><u>Knowledge revisited from year 7:</u></p> <ol style="list-style-type: none"> 1. Electronic key knowledge <p><u>Key skills:</u> Programming, code writing, schematic diagrams and evaluation of outcome and problem solving.</p>	<p>Interim Assessment: Silent starter recall will assess understanding every lesson.</p> <p>Final Unit Assessment: This will test spelling, knowledge and understanding of the learning focuses.</p> <p>Homework: Forms quiz checking knowledge and understanding of the learning focuses.</p> <p>Whole class reading: What is AI? What does artificial intelligence do?</p>