

What your child will do in Design and Technology.

Year 8



Electronic Control. Students construct a thyristor based latching circuit and explore the possible applications for such circuits. A wide range of input and output devices are introduced and students then go on to design and manufacture an alarm circuit of their own choice and fit it in a custom housing.

Level assessments: Writing technical specifications. Generation of design ideas. Design development process. Making strand.

Multi-cultural food. Spaghetti bolognese, bread rolls, risotto as part of the Licence to Cook programme. Extended task on food air miles. Unit is finished by a Business and Enterprise unit based on the Burger Challenge.

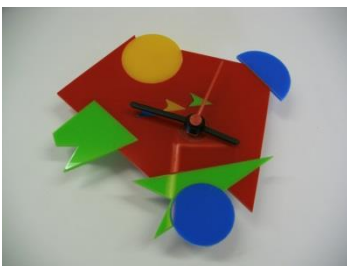
X-curricular: Cultural diversity and Sustainable Development.



Cushions. Students produce a range of design ideas based around a theme eg 'The Sea'. They will learn a range of decorative textile techniques including Tie-dye and general textile skills.

Marvellous Machines. Students investigate a range of mechanical toys based on levers, cams and linkages. They analyse different types of motion and experiment with models to develop their own toy.

Level assessment: Making and development. PLTS: Teamwork.



Design Styles. Students investigate the work of other designers before examining the Memphis school in greater detail. Use of CAD CAM to design and manufacture a clock in the Memphis style. Use of 2-D Design and laser cutter.

Assessment: Basic graphic rendering techniques. Accuracy of C.A.D. drawing and cutting / assembly of laser cut parts.

CAD Solid modelling. In this unit the students use the Prodesktop software to create 3D drawings of objects suitable for outputting on a 3D printer. They will also produce animated designs of engineered products that incorporate moving parts.

Assessment: The drawing and animation will be marked to level.

N.B. The Prodesktop software is available free for Wadebridge students to load onto their home computer.

Cartoon Nightlight. The students construct a light using a cartoon image applied to acrylic by the Laser Image Transfer (L.I.T.) process. Circuit housing is constructed from acrylic or plywood. Extension work allows for students to include a light activated circuit.

Level assessment: Planning / development.

Or

Graphics. Students develop a graphic image of an animal using only letters / words to define the shape and detail. They look at conservation issues and reflect their understanding by the selection of words used to create the image.

Assessment: The ability to manipulate text and the creativity and detail of the image generated. The understanding of the plight of specific endangered species and the threats they face.