

Design & Technology - Information

Year Group	Overview of Projects
1	<ul style="list-style-type: none"> DT activities are incorporated in Art
2	<ul style="list-style-type: none"> Projects mainly involve Art activities and teachers will adjust to the needs/abilities of the groups. <p>Example projects include:</p> <ul style="list-style-type: none"> ➤ Make a collage using different fabrics ➤ Produce a lighthouse using shapes which have been cut for the purpose. ➤ Produce a picture using paper shapes and sponge painting templates. ➤ Sculpt an object using clay. Produce a harvest apple and paint it. ➤ Make patterns using repetition of lines, shapes, tones and colours.
3	<ul style="list-style-type: none"> Projects also involve Art activities. <p>Example projects include:</p> <ul style="list-style-type: none"> ➤ Design and make a photo frame (portrait) for a special occasion. ➤ Aerodynamics: Make a paper plane. ➤ Fantastic beasts [Pneumatics: use air pressure to create movement]. ➤ Patterns
4	<ul style="list-style-type: none"> Design and make badges using computer-aided manufacturing (CAM) program and a badge press. Make twisted key fobs using acrylic. Cut letters out of manufactured board by hand and machine. Make a miniature cricket bat. Laser cut an A5 size puzzle.
5	<ul style="list-style-type: none"> Use solid wood and plywood to make a small box in which three layers of double-sided puzzles fit. Make a toy car from a solid block of pine wood.
6	<ul style="list-style-type: none"> Make a sweets bowl using two types of plastic and manufactured board. Pewter casting: Cast molten pewter into a shape designed using CAD (Techsoft Design) and made using CAM (laser cutting). Sustainability project: Prepare a presentation to raise awareness for the FSC (Forest Stewardship Council).
7	<ul style="list-style-type: none"> Make a Novelty Box using traditional woodworking skills and tools as well as CAD/CAM.
8	<ul style="list-style-type: none"> Design for a Target Market: A clock that displays a corporate logo. <p>Use an A4 size acrylic plastic sheet to design a self-standing clock and manufacture at least two.</p>

How time is divided between Cooking and Nutrition and Resistant Materials:

These two subjects are both part of Design and Technology. One half of a group will have Resistant Materials while the other will have Cooking and Nutrition. Groups swap over around February Half Term. In Year 1 and Year 2, DT is taught by the class teacher and in Year 3 it is taught as a separate subject by a teacher (not a class teacher) but still not by a subject specialist. At this stage, time is shared with Art.

Aims of teaching Design & Technology:

During the last Health and Safety audit, our DT facilities were described as 'extremely well equipped' and 'a very safe space to work', more what you would expect at a senior school. According to many current Beacon boys and parents, DT was the 'tipping point' in deciding to choose the school.

The aim of teaching DT, Resistant Materials, is to create enthusiasm in the boys to use their hands to make things. The right environment and opportunities are created in which the boys can express and develop this enthusiasm. A good balance is being kept between traditional handwork skills and the use of computers to design and manufacture. By the end of Year 8, boys have used most of the tools and equipment in the workshop. During this practical process of learning, they also learn the properties of a large variety of materials. During Year 7 and 8 they are gradually introduced to aspects of DT according to the National Curriculum so that they are well prepared when joining a senior school.

Presenting and record keeping:

As a method of presenting work, boys are using Seesaw, a web-based application that allows parents to see what their boys are doing, sometimes in real-time. Using Seesaw proved to be very successful and popular among parents. Boys love using it to proudly show their work by regularly taking pictures of practical work and videos to show what new skills they have learned. To do this they are making excellent use of an iPad. Teachers are using Seesaw to assess work, leave notes for boys and to communicate with parents.