

# Design and Technology- Curriculum Guide

## Year 8

### What will my son learn?

Design and Technology at KS3 works on an 8 week carousel. This allows students the opportunity to explore each of the 5 subject areas within D&T including Product Design, Food Technology, Engineering, Computer Aided Design and Graphics. Below shows what is covered in each of these projects.

Product Design	Food Technology	Engineering	CAD	Graphics
Puzzle Box Project	Special Dietary	Electronics	Google Sketch Up	Chocolate Project
Students design and manufacture a puzzle box made from Plywood. Students learn about different wood joints and have the opportunity to use different saws and machinery for the project. The project usually follows a rainforest animal theme, so students can personalise their box to look like an animal from the rainforest.	Students learn to create special dietary foods which include: - Banana loaf - Lemon drizzle cake - Parmesan chicken nuggets - Spicy rice - Vegetable samosa	Students are taught the fundamentals of electronics and are given the opportunity to design and make a circuit. Students will have the ability to use soldering irons and understand how a circuit board works.	Students make advancement in terms of computer aided design moving from 2D design to 3D design. Students use Google Sketch Up to design various shapes and objects using the tools available on the software.	Students design and make a chocolate bar using the vacuum former, laser cutter and 2D Design. Packaging is also created for their chocolate bar which allows each student to create a brand and understand the importance of packaging.

### How will my son be assessed?

Students have one, double period lesson each week across KS3.

KS3 is assessed mainly using Doodle. Students and parents are able to see where progress is being made within specific skills in each subject area. This is done by using the Red, Amber and Green system.

Pupils' books are also marked every two weeks, and are encouraged to respond to feedback. Each rotation will include some form of practical element where appropriate, and all students are given the opportunity to self and peer-assess their work.

All work which is marked on Doodle is linked directly with the new Design and Technology Curriculum and these are the skills all students are measured against throughout KS3.

Students are set homework each week and this can be in the form of research, design work, practical investigations or presentation work.

### How can I support my son with Design Technology?

Pupils should be encouraged to read around their chosen topic. They learn names of various tools, machinery and materials in the subject and so should understand each of these through research as well as practical use in lessons. Parents can assist by monitoring the pupils' reading and writing skills for any homework given and encourage them to share and verbalise their thoughts on academic concepts. Parents can also help by monitoring pupils planners, assisting with any homework or questions pupils may have and communicating with the teacher if there are any problems.

