Design & Technology

Year 7

Overview: The year is divided into four modules providing a carousel system. All pupils participate in four 'Product Design 'activities (Resistant Materials with Electronics and CAD/CAM) along with their Food Technology and Textiles entitlement.

Term 1 Programme of Study: Within term one students will undertake two of the modules of Design & Technology. They will take either Resistant Materials with Electronics, Textiles and Food or CAD/CAM. In Resistant Materials with Electronics students will be introduced to the design and make process. Students will learn a variety of skills to enable them to create a range of basic appropriate products by manipulating materials in a variety of processes. The Food technology scheme of work aims to introduce Year 7 pupils to basic food, nutrition and cookery skills. By the end of the unit pupils will have a variety of skills and knowledge to be able to create a range of suitable healthy snacks for a school packed lunch. Within Textiles students are introduced to basic hand and machine stitching as well as decorative techniques. By the end of this module students will have designed and created a decorative patchwork square. The CAD/CAM scheme of work endeavours to introduce students to a range of basic CAD skills which enables students to design a novelty ruler. Students will then work with CAM via the laser cutter to produce their design.

Term 2 Programme of Study: Students will carousel and undertake two of the areas they did not undertake in term 1.

Term 3 Programme of Study: Students will carousel and undertake two of the areas they did not undertake in term 1 or term 2.

Homework: In Design & Technology pupils will be given weekly homework tasks after their double lesson, these vary from; drawing exercises, question and answer, design work, spelling practice, ingredient purchasing, research, lesson recall and literacy tasks.

Assessment:

Pupils will be assessed at the end of each topic based on pupils team work, creativity, experimentation, presentation and understanding of processes, tools, materials and ingredients within each area of Design & Technology.

How parents can support learning: In Food Technology parents can support pupils learning by encouraging pupils to participate in preparing family meals and their own school packed lunches. Parents should encourage pupils to partake in the family food shopping experience. In Graphic Design and Resistant Materials parents can support learning by discussing architecture and structures around Abu Dhabi with pupils, and encouraging them to practice drawing in isometric and perspective. In CAD/CAM parents can support students by encouraging them to download and practice 3D design in Google Sketch Up.

Learning resources: Pupils will be given all the worksheets and handouts needed to complete these modules. If a student needs extra assistance with homework for any area of Design & Technology a useful website is www.technologystudent.com. Pupils will be expected to buy their own food ingredients (List will be provided by class teacher) as the experience for shopping for themselves is considered a life skill.