



St Benedict's Catholic School

The Catholic Secondary School for West Suffolk

Design and Technology Resistant Materials Curriculum Guide

Year 7

At KS3 Design and Technology groups are rotated Termly to allow all pupils to experience the 3 key areas of the subject, namely Graphic Products, Resistant Materials, Food and Nutrition. Therefore, each group will move to a different specialism at the end of each term.

Course Taught Content

Acrylic charging/docking unit for a mobile phone

Pupils are presented with the challenge of designing and making a functioning phone stand from acrylic sheet. The project begins with a consideration of how and why we store items. They will generate a range of potential ideas and go on to model the best of these using card.

They will acquire practical skills, such as using the line bender, shaping their acrylic using hand tools and workshop machinery. and will be introduced to CAD/CAM to help them make smaller decorative parts. There is a strong emphasis placed on safe and appropriate working practices in the workshop.

They will develop an understanding of key design issues such as sustainability, meeting the needs of potential users and the impact of plastic use on our lives.

Assessment

Pupils are assessed with a focus on 'Ideas and Development', this will cover their clear communication of ideas through both visual and written outcomes. They will also receive regular (twice per term) formative feedback, in-depth assessment and an end of year full subject exam style appraisal. Due to the termly rotation between subjects the final assessment will incorporate all three specialisms. (Graphic Products, Resistant Materials, Food and Nutrition).

Homework Expectations

Homework is set every two weeks (approximately 3 times per half term) The tasks set will vary depending on the stage of each project, but will include, personal research, investigation or personal visual responses about the given theme. In most cases this will involve pupils printing outcomes and bringing these to their next lesson, rather than submitting via Edulink. The homework will predominately help pupils to enhance and inform their classroom work and is vital due to limitations with computer access.

Reading List

Pupils are provided with a photocopy of 'The Design Process' -page 5 Foundation Course (Collins). This provides a clear overview of the different connected stages of the accepted design process.