



Design and Technology Graphic Products Curriculum Guide

Year 9

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

Working collaboratively is a useful skill as pupils move towards different career choices. Being an effective member in a team is a vital skill to have; along with problem solving and improving your own learning. We will work in small teams for our main year 9 project.

For pupils in year 9 the development from understanding customer needs in year 8 will be applied to real world situations; and an understanding of how we, as humans, interactive with our environment. This can include the products we use, both large and small, our living and working environments and how this interaction needs to be central to useful and effective design considerations.

The central element we will be following is architecture, with a key topic of Biomimicry. Pupils will engage in developing architectural concepts using Biomimicry to influence and impact subtly on their design ideas. We will explore existing buildings and structures to gain a better understanding of what makes a successful scaled architectural model.

Using drawing skills learnt in year 8 will help pupils to communicate their ideas effectively and clearly. Using a range of materials, techniques and processes will enable pupils to make useful concept models to explain their ideas in 3D.

Assessment

Pupils are assessed with a focus on 'Evaluation', this will be demonstrated through a number of written tasks. There will be a Critical Analysis of a given Architect's work, both formative and summative assessments of their own personal design development, as well as peer assessments and presentations of their final architectural models. 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

Biomimicry

<http://www.bbc.co.uk/earth/story/20150913-nine-incredible-buildings-inspired-by-nature>

Organic

<https://www.zmescience.com/science/organic-architecture-feature-813531/>

10 secrets – iconic architecture

<https://architizer.com/blog/inspiration/industry/your-magnum-opus/>