



Design Technology & Computer Science at KS3

Our KS3 Model

At Key Stage 3 pupils are placed in mixed ability groups.

In years 7 and 8 they receive 3 lessons per fortnight and rotate between material areas once a term completing approximately 12-13 weeks per cycle.

In year 9 they receive 4 lessons per fortnight and rotate 4 times in the year completing approximately 9-10 weeks per cycle.

The KS3 schemes of work are inspired by the National Curriculum Programmes of Study (2014) and the DATA (Design and Technology Association) Expert Group Progression map.

Students in year 7 and 8 will experience each of the main material areas (Food, Textiles, Resistant Materials, Graphics, Computing and STEM). At present, Electronics is not being delivered due to staffing but we will be developing this over the next academic year with a view to some basic electronics being delivered in year 9.

Year 9 will undertake 4 units of work across the year. The aim is to try and provide some further experience to help inform options choices.

Current KS3 Projects

Graphics: Chocolate bar design challenge / Computer mouse design

Textiles: Dreamcatcher project / Design a Bucket Hat

Food: Healthy Eating / Healthier take-aways

RM: Automata project / Picture frame / Phone Stand

Core STEM: Nightlight (in development)

Computer Science: Build a game in scratch / BBC Microbit and robotics

STEM Pathway: In addition to the options above STEM cover, Non-ferrous casting of Jewellery, Design a plastic boat, Introduction to Python programming, Computer systems architecture and operation (GCSE linked)

Fig. 1 Key Stage 3 Curriculum Model

Year 7 & 8 Curriculum						Year 9 Curriculum			
Autumn		Spring		Summer		Autumn	Spring	Summer	
Y7 Project 1	Y8 Project 4	Y7 Project 2	Y8 Project 5	Y7 Project 3	Y8 Project 6	Project 1	Project 2	Project 3	Project 4
Key Stage 3 Core Technical Knowledge and Tracking									

Assessment

For all pupils in year 7, Baseline testing provides initial data with which to gauge ability, prior learning and is used to inform teaching and learning from that point as well as where pupils may need additional support or intervention for lost learning. Baseline tests are carried out early in the Autumn term and data is recorded on a department tracking sheet.

At Key Stage 3 Assessment is managed in line with Academy policy using a 4 tier model. The model starts at 'Developing' level progressing to 'Secure', 'Advanced' and 'Exceptional'. Assessment criteria for each unit are created in line with the DATA progression document, but there are also specific generic DT descriptors for parents and pupils which give a holistic view of a pupil's attainment for each of years 7, 8 and 9 (See D&T Curriculum Statement document for details).

Pupils are tested twice a term regardless of which unit they are working on. One test assesses core and the other specialist knowledge and progress. These are recorded and tracked within the department and we are currently developing our practice in this area to improve consistency of practice and pupil progression across time and across material areas. Pupil progress is also tracked using whole school tracking systems and data analysis tools, with regular termly data captures.

