

# D&T KS3

# Curriculum Map

## Next steps...

- ...Options
- ...D&T GCSE

### Year 9 Timber project

- ◆ Evaluate the different stages of making a prototype.
- ◆ Follow simple written instruction for making a prototype.
- ◆ Will follow the design process
- ◆ Model and make a finished product.
- ◆ Make design decisions, evaluate and improve design where and when appropriate.

### Year 8 Sketching and modelling

- ◆ Use a variety of medium to show concept designs
- ◆ Make effective scale models of their designs
- ◆ Use CAD throughout the development process of designing.
- ◆ Develop a specification and design ideas from a design context

### Year 7 Mechanical Systems

- ◆ To use tools and equipment in the workshop to make a working mechanical/automated toy.
- ◆ Recognise and name the four different forms of movement.
- ◆ Understand how an input motion can be changed to a different output motion by a mechanism
- ◆ Use different cams and followers to design mechanisms

### Assessment Tests:

Learners will be given quizzes at the start of each lesson.

End of unit test: At the end of each unit a test would be given to secure their knowledge and understanding.

### Year 9 Functionality & Aesthetics

- ◆ Drawing and sketching:
- ◆ Making design choices: Using tools and equipment for modelling.
- ◆ Being able to generate design ideas inspired by organic form.
- ◆ Recognise where and how architectural examples have been inspired by organic forms.
- ◆ Generate their own design ideas inspired by organic forms.

### Year 8 Innovation through iterative design

- ◆ Generate a range of ideas through sketching and modelling, testing and evaluating
- ◆ Use a range of tools and equipment to make a model or prototype
- ◆ Use a range of modelling material to produce a final prototype.
- ◆ Use the iterative design process to develop design ideas

### Year 7 Problem Solving

- ◆ List different ways to research a design problem
- ◆ Define the terms: user, client, target market and ergonomics
- ◆ Product analysis.
- ◆ Create a design specification
- ◆ Recognise the terms 'consumer-' and 'focus groups'
- ◆ Produce a working product.
- ◆ Generate ideas designed for disabled users

