



## Design & Technology 2018-19 | Year 8

### Learning Over the Year -

#### **Outline:**

*In Design Technology students will work on a rotational system of 7/8 weeks and finish with a unit test. This should enable all students by the end of the academic year to have experienced the 4 disciplines of Food Preparation and Nutrition, Product Design, Materials Technology and Electronics and Mechanical Systems. This should provide students with a foundation of knowledge and skills in the topics. Finally, enabling students to make an informed decision of which subject discipline they may wish to pursue in KS4.*

#### **Rotation 1: FOOD PREPARATION & NUTRITION**

*During this topic students will aim to be more independent in the kitchen. The aim is to build on student's foundation skills to develop practical and theoretical skills in food preparation and nutrition. This will be achieved by application, research and testing of ingredients and completion of different food preparation tasks.*

#### **Rotation 2: MATERIAL AND **THERE** WORKING PROPERTIES**

*In this topic students will develop skills in working with a multitude of different materials and consider their working properties. Students will research a specific design to influences there work and develop design ideas and techniques. From this the students will develop a mould to cast into.*

#### **Rotation 3: DESIGN MOVEMENTS & CAD.CAM**

*Students will learn about the basics of design, the design circle and design development. The aim is to develop student's practical and theoretical skills in creative design and the CAD/CAM. This will be done by the completion of a unit project, where students will design and create their own outcome.*

#### **Rotation 4. ELECTRONICS, MODERN MATERIALS & TEXTILES**

*(This unit is broken down in to 3 miniature units)*

*Students will develop their knowledge of basic systems and electronics in this unit while working with and learning about prototyping electronics. The aim is to further develop student's practical and theoretical knowledge of inputs, processes and outputs. This will be done by the exploration and bread boarding electronics. 3 weeks*

*Student's ultimate aim is work safely and learn about a multitude of modern, smart and composite materials and there properties to give them a foundation leading to GCSE should the take it. 2 week*

*Students will learn about a multitude of different textiles and there properties. With these in mind, they will work on developing creative design ideas for a specific user. 3 weeks*

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### Homework & Assessment -

*Students will complete pieces of home learning during each rotation. In addition, students will be assessed over the rotation and given levels based on the work they have completed. Finally, all students will have an end of unit test which they will be expected to revise and plan for at the end of each rotation, giving them an overall final level for each rotation.*



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### **Exam Board Information -**

Not Applicable

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### **Subject Contact Information -**

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### **Useful Links -**

#### ***Useful websites***

*Technologystudent.com*

*Mr-DT.com*

*childrensfoodtrust.org.uk/*

#### ***Holiday visits***

*Design Museum*

*Science Museum*

*100% Design - exhibition*

*Gadgetshowlive - exhibition*