**Students will follow the National Curriculum for DT in years 7, 8 and 9 on a carrousel. They will move through Food and Nutrition, working with Textiles, wood, metal and paper/board. This allows interleaving their knowledge from one material area into another to deepen their understanding of the issues relating to DT. Some aspects of DT have cross curricular links with Science, maths, geography, computing and Business Studies, allowing students to develop a greater awareness of how DT fits in modern society and the technological world we live in. By considering design, make, evaluate and technical knowledge students will be able to apply their learning to a variety of design and make projects throughout the carrousel.**

**Students will learn:**

* Research and explore different cultures, moral issues, impact on society of products and a designers responsibilities.
* Products impact on the environment and the sustainability of materials.
* Solving problems
* Developing innovative, functional appealing products in a variety of situations
* Creativity – avoiding design fixation
* Sketching and communicating design ideas. Formal and informal design work in 2D and 3D, computer modelling/simulation, physical modelling
* Select and use a variety of specialist tools, techniques and processes to safely produce accurate outcomes.
* Investigate and use a wide variety of materials, including smart and modern materials to produce physical outcomes.
* Analyse the work of past and present professionals to broaden understanding of DT and the careers it can lead to
* Investigate new and emerging technologies such as CAD, CAM, simulation
* Test, evaluate and refine ideas and products
* Structural elements, forces and the properties of materials
* Mechanical systems and enabling changes in movement and force

**Cooking and Nutrition**

* Understand and apply principles of health and nutrition
* Be able to apply basic food safety principles
* Cook a variety of savoury main meal and sweet dishes
* Become competent in a range of cooking techniques such as: selecting and preparing ingredients, using utensils, heat, seasoning, combining ingredients, awareness of taste and texture.
* Understand the source, seasonality and characteristics of a broad range of ingredients

**Subject: Design and Technology, Food and Nutrition Year Group:7,8,9**

