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| **Year 7 – Design Technology 2024-25** |
| **Curriculum intent** | Design Technology is about viewing the world around us. To look at where we are now in the 21st century, and where we could be in the future. To know about past and present designers, inventors and innovators and aspire to become people that design and shape the world. In an increasingly technological society we aim to encourage students to think independently and be creatively when working on a problem. We intend to teach students to be problem solvers in a safe learning environment and explain that making mistakes is okay, and part of the development of process. To build upon theory using research and ideas across all subjects and then apply it to solve real world issues. Design Technology is an inspiring practical subject using a broad range of subject knowledge such as mathematics, science, engineering, computing, food science and art. High-quality We aim to empower students to become the people who will solve the issue of tomorrows world. For example, climate change and the quality of life. Design Technology education makes an essential contribution to the creativity, culture, wealth and well-being of the human race and how we can help the world around us. The Technology Department includes both Design Technology and Food. It aims to develop our students’ curiosity and understanding of the world around them through the products they use and the food they eat. The ‘hands-on’ practical aspects of the course serve to develop our students’ skills and confidence with both workshop processes and kitchen equipment. They find how to use equipment safely and appropriately and how to select materials or ingredients according to their specific properties and uses.Creativity and problem solving underpin the ethos of our design and planning work and a core part of this is studying the approach of well-known and important chefs or designers. Students are also challenged to think about their social and environmental responsibilities e.g. concerning the origin, production, use, disposal and wastage of materials, food and other natural resources. |
| **Rotational** | **Design Technology – Product Design**You will be learning about the basic hand and power tools within the design technology department through the production of a Brahma puzzle, also known as ‘The Tower of Hanoi’. Throughout the brief you will learn to safely use all the tools required and also to use some elements of digital software graphical packages, 3D CAD and CAM. | **Food Technology**Students will learn about the different health and safety rules we must follow in the kitchen. They will demonstrate a secure knowledge of these rules both theoretically and in practise. They will also demonstrate how to safely cook and use a knife. Students will learn about the Eatwell Guide. They will demonstrate a secure knowledge of the different areas within the Eatwell Guide with regards to how much of each section they should eat and its function within the body. Alongside this, students will look at food provenance and allergens related to the various food groups. |
| **Knowledge** | * How to use both hand and power tools safely and confidently within the workshop
* How to measure and mark accurately using the correct tools and equipment
* The process required for CAD/CAM to be operated
* How to apply and when to use different finishes for different purposes
* 5. How to evaluate their success
 | * The different hygiene rules for the kitchen and are able to explain why they must follow these rules.
* The different safety rules for the kitchen and are able to explain why they must follow these rules.
* The different types of knife cuts.
* The different components that make up the Eatwell Guide.
* What the functions of the different components of the Eatwell Guide are for the body.
* How much of each component of the Eatwell Guide a person should eat per day?
* What an allergen is and how it can affect the body
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| **Skills** | * Computer-aided design
* Computer-aided manufacture
* Power Tools
* Hand Tools
 | * Food Safety practices
* Preparation techniques
* Knife techniques
* Cooking techniques
* Using the oven & hob
* Presentation techniques
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| **Assessments** | Practical assessment, ongoing theory assessments. | Practical assessment, ongoing theory assessments. |
| **Enrichment**  | <https://learning.sciencemuseumgroup.org.uk/resources/?subject=design-and-technology> | Watch Great British Menu· Students will have an opportunity to cook a Halloween based cook in the after-school club. |