

***Design Technology Half Term 1***

***YEAR 7 OVERVIEW Pupils will learn:***

***Food and Nutrition***

Through this project, pupils will:

* Understand risks in the kitchen and how to stay safe (including the “4 Cs” of hygiene: cooking, cleaning, chilling, and avoiding cross-contamination).
* Identify the five main nutrients (carbohydrates, protein, fats, vitamins, and minerals) and their sources.
* Apply this knowledge to the **Eatwell Guide** and evaluate their own diet.
* Prepare and cook a range of mostly savoury dishes using different cooking techniques.

**Why this matters:** This project equips pupils with essential life skills for healthy living. They will build confidence in cooking, learn to make balanced meals, and establish knowledge that links to both science and health education.

| **Lesson 1** | **Lesson 2** | **Lesson 3** | **Lesson 4** | **Lesson 5** | **Lesson 6** | **Lesson 7** | **Lesson 7** | **Lesson 8** |
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| Hazards | Room Layout & Equipment Safety | 4C's & Control Measures | Knife Safety  Fruit Salad Practical | 5 Main Nutrients: Macro | 5 Main Nutrients: Micro | Bolognese Practical | Eatwell Guide | Weights and Measures |

***Design Technology: Wooden Animal***

Through this project, pupils will:

* Learn about different types and classifications of timber.
* Understand the importance of health and safety in the workshop.
* Use a variety of hand tools and machines safely.
* Design and make a wooden animal of their choice.

Why this matters:  
 This project builds confidence in working with materials, teaches pupils how to use tools safely, and introduces them to the design–make–evaluate process.

| **Lesson 1** | **Lesson 2** | **Lesson 3** | **Lesson 4** | **Lesson 5** | **Lesson 6** | **Lesson 7** | **Lesson 7** | **Lesson 8** |
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| Intro to project. Health & Safety | Theory of Timbers | Formative assessment  Purpose & Securing templates to material | Learn Skill: Drilling | Learn Skill: Fret Saw | Learn Skill: Hand tools | Formative assessment  Learn Skill: Assembly/Adhesives | Evaluation | Summative unit assessment |

***Design Technology: Battery Tester***

Through this project, pupils will:

* Learn what smart materials are, how they are used in everyday products, and their commercial applications.
* Understand the role of CAD (Computer-Aided Design) in designing and making products.
* Gain a basic knowledge of electrical components and how to construct a simple circuit.
* Design, make, and test a battery tester.

**Why this matters:** This project develops problem-solving, design skills, and technical knowledge, giving pupils a foundation for future electronic and digital design work.

| **Lesson 1** | **Lesson 2** | **Lesson 3** | **Lesson 4** | **Lesson 5** | **Lesson 6** | **Lesson 7** | **Lesson 7** | **Lesson 8** |
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| Intro to Project. Smart materials. | Formative assessment  Colour Theory | Learn Skill: Designing and Drawing styles | Learn Skill:  CAD | | Making the circuit | Learn Skill:  Manufacture | | Summative unit assessment |