DT at Droxford Junior School

Over their time at Droxford, the children at our school complete a wide range of Design and Technology activities that develop and build a variety of different skills including cooking, construction, textiles and electricals. We believe that building a rich and varied DT curriculum is important for the development of our children and encourages a love for learning. We use the six DT principles (use, purpose, functionality, design decision, innovation and authenticity) to structure our planning and across the curriculum, our DT units work alongside our Geography and History topics in order to build and develop the children's learning across the curriculum.

Year 3 and 4

Over Cycle A, the children begin the year with a **Latkes** unit; developing an understanding of traditional Jewish food to link with the RE topic Hanukkah (within the big idea of Rituals). Within this unit, the children are either introduced to our build on their cooking and nutrition skills. In the Spring Term, children are introduced to textiles techniques in making **Teddies**. Children design their own teddies, study the process of making and then use textiles techniques to make their own creation by sewing. They will then use these teddies as part of their WWII project in Summer Term. To work alongside their WWII History topic, the children create **Blitz Boxes** in the summer term. In this unit, the children are challenged by using both construction and electrical skills in order to make a light up wooden blitz box which they have designed and created.

Over Cycle B, in the Autumn Term, the children complete a cooking and nutrition unit (building on the skills from Egyptian food) of **Making Bread** where the children research the importance of bread in the context of the Geography topic 'Ice to Iron' and then plan, prepare and make their own bread. Children also build on their construction and electrical skills in the Spring Term to create **Avalanche Alarms**. Children research avalanche warning signs and the electrical process of LED lights. Children then design, prepare and make their avalanche alarms by sawing wood, gluing together and adding LED lights to go alongside the Geography topic of Contrasting Localities. In the summer term, construction skills are build on when the children create **Roman Chariots** where they research, plan and make their own Roman Chariots by sawing wood and using glue.

Year 5 and 6

Over Cycle A, the children build on and progress the skills that they have learned in Year 3 and 4. In the Autumn Term, the children build on their construction and electrical skills to research sustainable materials to make a **Brompton Bicycle** as well as designing their own hi-vis clothing and bicycle tyres before filming their own advert. Children will revisit their cooking and nutrition skills in the **Greek Food** topic to link with the Geography topic of The Greeks. In this unit, the children progress their skills and research, design and make a healthy Greek dish by following a given criteria. The children are given the freedom to creatively design their meals so that there can be a 'banquet' featuring all the children's creations at the end of the unit. In the summer term, linking with the Geography topic 'Our Green Planet', the children will complete a **Sustainable Droxford** project. In this unit, children build on their construction skills in researching, designing and making a prototype of a sustainable house.

In Cycle B, the first DT unit is linked with the History topic 'The Caribbean' in which the children research, design and make healthy, savoury **Caribbean Food** of their design, following a given criteria. Similarly to the Greek Food unit in Cycle A, the children are given more creative freedom in order to properly apply the cooking and nutrition skills learned in Year 3 and 4. In the spring term, the children revisit their textiles skills from making teddies in Year 3 and 4 and create **Money Pockets** embroidered and embellished with Tudor designs to work alongside the Tudor History project. In the summer term, the children spend time researching the work of Norman Foster before researching, designing and creating their own operational **Suspension Bridges**. This unit builds on the children's construction and mechanics skills whilst working alongside the knowledge the children develop in their 'Rivers' geography topic.