YEAR 3 DESIGN AND TECHNOLOGY CURRICULUM FRAMEWORK

St Peter's PRIMARY SCHOOL

Overview of Key Stage 2 Curriculum:
Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

AUTUMN TERM 1	AUTUMN TERM 2	SPRING TERM 3
Tremors	**Scrumdidlyumptious**	**Mighty Metals**
DT M 2 Select from and use a range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities. **DT D 2; DT TK 1, 3** Children use a range of modelling materials and tools to construct their own 3-D model volcanoes. They add special effects, perhaps creating lava that lights up or a volcano that rumbles and shakes or vinegar and bicarb eruptions. **DT TK 1 Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.** **DT M 1, 2** Children take part in a 'Structures challenge' to see who can build the best earthquake-proof tower or shelter. They work in teams to select materials and decide upon the design and construction methods. The structures are then shake tested to see which have been successful.	**DT E 1 Investigate and analyse a range of existing products.** **DT CN 2** Children sample different types of bread. They describe how the breads vary in taste and texture using a variety of adjectives and expressions. **DT CN 2 Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.** **DT M 1, 2** Children take part in baking activities that need mathematical skills to reweigh and measure ingredients accurately. They follow recipes given to them, planning the ingredients and tools needed. **DT D 1 Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.** **DT D 2, DT E 1**	**DT D 1 Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.** **DT M 1, 2; DT E 2** Children make simple spinners using cardboard discs with a cocktail stick or pencil pushed through their centres. They explore different materials to improve the spinners and trial them on different surfaces. Does the surface affect how long they spin? Which material produced the best spinner? Should the end of the shaft be sharp or blunt? **DT M 2 Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.** Children play with a large playground parachute, experiencing what happens as they move it up and down. Describe what they can feel happening. Children Make their own mini parachutes using a selection of

	Children look at and evaluate a range of existing chocolate packaging before designing packaging for a fantastical new chocolate bar of their own. They plan their designs thinking about the text type and colours they may use.	materials such as plastic bags, nylon and paper. They tie small figures or plasticine to their parachutes and see what happens when the items are dropped from different heights. **DT D 1 Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.** **DT E 1, 2; DT D 2; DT M 1, 2** Children design and make a magnetic travel game. They conduct market research to find out what board games are popular amongst friends and family and use this information to inform their design. They then test their own games and feedback on their effectiveness.
SPRING TERM 4	**SUMMER TERM 5**	**SUMMER TERM 6**
Gods and Mortals	**Predator**	**Flow**
DT D 2 Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. **DT M 1, 2; DT E 2** Children imagine they are Daedalus, the master craftsman to design a pair of wings for Icarus – ones that would withstand the sun's heat! Experiment with design options, labelling moving parts and identifying which materials they would use to meet the purpose for which they are intended. **DT M 2 Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.**		

DT D 2; DT M 1; DT E 2 Children construct their own decoy vessel using recycled materials in the style of the Trojan horse the Greek army used to rescue princess Helen and invade the city of Troy. They attach their models to a wheel-based axle to enable it to be moved inside the wooden gates before decorating in an appropriate style.		