

Design & Technology- Substantive Knowledge Map

Unit	Year 5	Vocabulary	Retrieval Opportunities
Food Celebrating culture and seasonality (including cooking and nutrition requirements for KS2)	Naan Bread <ul style="list-style-type: none"> - To understand and apply the principles of a healthy and varied diet - Cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet - Become competent in a range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients; adapting and using their own recipes] - To understand the source, seasonality and characteristics of a broad range of ingredients - To 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. - To generate, develop, model and communicate their ideas through discussion and annotated sketches. - Select from and use a wider range of materials and components, including ingredients, according to their functional properties and aesthetic qualities. - Investigate and analyse a range of existing products. - Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. 	ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble design specification, innovative, research, evaluate, design brief	
Structures Frame structures	Bridge <ul style="list-style-type: none"> - To 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. 	frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent design brief, design specification,	

	<ul style="list-style-type: none"> - To generate, develop, model and communicate their ideas through discussion, annotated sketches and prototypes. - Select from and use a wider range of tools and equipment to perform practical tasks: cutting and joining accurately. - Investigate and analyse a range of existing products. - Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. - To understand how key events and individuals in design and technology have helped shape the world - Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. 	prototype, annotated sketch, purpose, user, innovation, research, functional	
Mechanical Systems Pulleys or gears (after gears in Science)	Fairground Ride <ul style="list-style-type: none"> - To 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. - To generate, develop, model and communicate their ideas through discussion, annotated sketches, exploded diagrams and prototypes. - Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. - Select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities. - Investigate and analyse a range of existing products. - Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. - To understand how key events and individuals in design and technology have helped shape the world - To understand and use mechanical systems in their products. 	pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor circuit, switch, circuit diagram annotated drawings, exploded diagrams mechanical system, electrical system, input, process, output design decisions, functionality, innovation, authentic, user, purpose, design specification, design brief	