

## Design Technology

**Curriculum Map.** NB: In primary phase each year group will participate in three art and design topics, and three design and technology topics. In Summer 1, all year groups will complete a DT Day.

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
1	<p><b>Memory box DT</b> <b>Memory Box</b> Decide what types of food would be good for their teddy bears' picnic, making a shared shopping list. Make simple, healthy sandwiches for young children, creating a balance of sweet and savoury fillings. Understand that food will come from plants and animals. Name some foods and begin to sort them into the 5 groups. Know that everyone should try to eat 5 portions of fruit and veg a day. Select and use appropriate fruit and vegetables, processes and tools eg grating, peeling and cutting Use basic food handling, hygienic practices and personal hygiene</p> <p><b>Vocabulary</b> fruit and vegetable names, names of equipment and utensils, sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard, flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients, planning, investigating, tasting, arranging, popular, design, evaluate, criteria</p>	<p><b>Big Lights, Big City DT</b> Exploring mechanisms; Constructing moving models; Designing and making souvenirs</p> <p><b>Design Planning and communicating ideas.</b> Draw on their own experience to help generate ideas Suggest ideas and explain what they are going to do Identify a target group for what they intend to design and make Model their ideas in card and paper Develop their design ideas applying findings from their earlier research</p> <p><b>Working with tools, materials and components to make quality products</b> Make their design using appropriate techniques With help measure, mark out, cut and shape a range of materials Use tools <i>eg scissors and a hole punch</i> safely Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape</p> <p><b>Evaluating Processes and Products</b> Evaluate their product by discussing how well it works in relation to the purpose Evaluate their products as they are developed, identifying strengths and possible changes they might make Evaluate their product by asking questions about what they have</p>	<b>Moon Zoom! ART</b>	<b>The Enchanted Woodland ART</b>	<b>Paws, Claws, Whiskers DT</b> <b>Whole School focus on Textiles – Theme TBC</b>	<b>Rio de Vida ART</b>

		<p>made and how they have gone about it</p> <p><b>Vocabulary</b>  slider lever pivot slot bridge/guide, card, masking tape paper fastener join pull push up down straight curve forwards backwards</p>				
2	<p><b>Muck, mess &amp; mixtures. DT/FOOD</b>  Taste a range of foods and drinks from around the world and describe the flavours. Sort a range of foods in different ways to show where they have come from. Explain how and why foods have been sorted in a specific way. Sorting healthy and unhealthy meals. Make healthy meal.</p> <p>Understand that all food comes from plants or animals. Develop and understanding of where different food comes from and food which is native to different countries. Understand how to name and sort groups into 5 groups. Recognise need for a varied diet. Follow safe procedures for food safety and hygiene. Demonstrate how to prepare simple dishes safely and hygienically without a heat source. Demonstrate skills such as cutting. Peeling and grating.</p> <p><b>Vocabulary</b>  fruit and vegetable names, names of equipment and utensils, sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard, flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients, planning, investigating tasting, arranging, popular, design, evaluate, criteria</p>	<p><b>Towers tunnels &amp; turrets. DT</b>  Design, build and evaluate structures and turrets.  <b>Mechanisms; Structures</b>  Design, Planning and Communicating Ideas.  Generate ideas by drawing on their own and other people's experiences  Develop their design ideas through discussion, observation, drawing and modelling  Identify a purpose for what they intend to design and make  Identify simple design criteria  Make simple drawings and label parts  <b>Working with tools, materials and components to make quality products</b>  Begin to select tools and materials; use vocab' to name and describe them  Measure, cut and score with some accuracy  Use hand tools safely and appropriately  Assemble, join and combine materials in order to make a product  <b>Evaluate Processes and Products</b>  Evaluate against their design criteria  Evaluate their products as they are developed, identifying strengths and possible changes they might make  Talk about their ideas, saying what they like and dislike about them  <b>Vocabulary</b>  cut fold join fix weak/strong stable thinner/thicker fixed joint moving joint reduce/reuse/recycle material paper card glue tape names of shapes &amp; properties</p>	<b>Street Detectives. ART</b>	<b>Wriggle &amp; crawl. ART</b>	<p><b>Scented garden. DT</b>  <b>Whole School focus on Textiles – Theme TBC</b></p>	<b>Land ahoy. ART</b>

		structure framework base top/side/edge surface corner straight				
3	<p><b>Scrumdiddlyumptious</b> Explore a range of fruit and veg and where it comes from. Take part in baking activities that need accurate weighing and measuring. Follow simple instructions or recipes, planning the ingredients and tools needed. Sort foods into the main food groups using hoops and baskets. Create a plan for a nutritional packed lunch box or picnic</p> <p>Know that food is grown, caught and reared in the UK, Europe and the wider world.</p> <p>Understand how to use a range of techniques such as peeling, chopping, cutting, spreading, slicing and grating</p> <p>Use a vegetable knife</p> <p>Know that to be healthy and active food and drink are requires to provide energy</p> <p><b>Vocabulary</b> name of products, names of equipment, utensils, techniques and ingredients, texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet, planning, design criteria, purpose, user, annotated sketch, sensory evaluations</p>	<p><b>Mighty metals</b> <b>Making wind chimes</b> Design, Planning and Communicating ideas Generate ideas for an item, considering its purpose and the user/s Identify a purpose and establish criteria for a successful product. Plan the order of their work before starting Explore, develop and communicate design proposals by modelling ideas Make drawings with labels when designing</p> <p><b>Working with tools, materials and components to make quality products</b> Select tools and techniques for making their product Think about their ideas as they make progress and be willing change things if this helps them improve their work Measure, mark out, cut, score and assemble components with more accuracy Work safely and accurately with a range of simple tools</p> <p><b>Evaluating Products and Processes</b> Evaluate their product against original design criteria <i>e.g. how well it meets its intended purpose</i> Disassemble and evaluate familiar products</p> <p><b>Vocabulary</b> three-dimensional (3-D) shape, net, cube, cuboid, prism, vertex, edge, face, length, width, breadth, capacity, marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, stable, unstable reduce, reuse, recycle, corrugating, ribbing, laminating, decision,</p>	Gods & mortals. ART	Tremors.	Heroes and V DT Whole School focus on Textiles – Theme TBC	Predators. ART

		evaluating, design brief design criteria, innovative, prototype				
4	Roman Empire. <b>ART</b>	<p><b>Bottoms, burps &amp; bile. DT/FOOD</b></p> <p>Adapt popular recipes to make healthier snack options. Make vegetable wedges instead of chips and sugar free cakes sweetened with fruit. Put the foods to the test, describing how they taste and which they prefer. Find out which foods contain the most sugar by studying packaging and labels. Focus in particular on foods sold as healthier options. Make snack packs containing healthy options that support digestive health. Identify where food sources originate.</p> <p>Know that food is grown, caught and reared in the UK, Europe and the wider world</p> <p>Understand how to cook predominatly savoury dishes , including having experience of using a heat source.</p> <p>Understand how to use a range of techniques such as peeling, chopping. Grating, mixing, spreading, kneading and baking. Measure and weigh ingredients accurately.</p> <p>Understand why a healthy diet is important,</p> <p>Know that to be healthy and active food and drink are needed for growth and energy</p> <p><b>Vocabuary</b></p> <p>name of products, names of equipment, utensils, techniques and ingredients, texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet, planning, design criteria, purpose, user, annotated sketch, sensory evaluations</p>	<p><b>Traders and Raiders. DT</b></p> <p>Design , make and evaluate an automata of a ship on the sea.</p> <p><b>Design, Planning and Communicating ideas</b></p> <p>Generate ideas, considering the purposes for which they are designing</p> <p>Make labelled drawings from different views showing specific features</p> <p>Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail</p> <p>Evaluate products and identify criteria that can be used for their own designs</p> <p><b>Working with tools, materials and components to make quality products</b></p> <p>Select appropriate tools and techniques for making their product</p> <p>Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques</p> <p>Use simple graphical communication techniques</p> <p>Join and combine materials and components accurately in temporary and permanent ways</p> <p><b>Evaluating Processes and products</b></p> <p>Evaluate their work both during and at the end of the assignment</p> <p>Evaluate their products carrying out appropriate tests</p> <p><b>Vocabulary</b></p> <p>evaluate prototype purpose function appealing planning adapt modify innovative evaluation annotated sketch construction sequence design brief design criteria intended</p>	Blue abyss. <b>ART</b>	<p><b>Misty mountain. DT</b></p> <p><b>Whole School focus on Textiles – Theme TBC</b></p>	<p><b>Misty mountain. DT and ART</b></p> <p>Mountain climbing equipment</p>

			<p>user structure net length width stiff strong stable unstable 3-D shape marking out shaping adhesives material reduce, reuse, recycle score assemble</p>			
5	Stargazers. Art	Off with Her Head.	<p><b>Early Islamic Civilisation ART &amp; DT -Food</b> Collect recipes of food children eat at home. Explore where ingredients originate and possible reasons why (climate etc) Make food using a range of techniques. Consider how the food contributes to a balanced diet. Evaluate the food, Begin to explain how ingredients are grown, reared and caught in the UK, Europe and the wider world. Understand that seasons may affect the availability of food. Know how to prepare and cook a variety of predominantly savoury dishes including with the use of a heat source. Demonstrate increasing confidence in how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. Evaluate a meal they have made and consider how it contributes towards a balanced diet. Recognise that different food and drink contain different substances that are needed for health. Begin to select and use appropriate tools and equipment, including for weighing and measuring <b>Vocabulary</b> 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,</p>	Was Titus a hero or a villain? ART	Pharaohs DT Whole School focus on Textiles – Theme TBC	<p>Scream machine. DT Designing, make and evaluate rides; Programming models <b>Designing, Planning and Communicating ideas</b> Start to generate, develop, model and communicate their ideas through discussion, annotated sketches and exploded diagrams. Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose. Use results of investigations, information sources, including ICT when developing design ideas. With growing confidence, apply a range of finishing techniques, including those from art and design. Draw up a specification for their design (link with mathematics and science). With growing confidence, plan how to use select appropriate materials, tools, processes and techniques. Show some understanding of how much products cost to make, how sustainable and innovative they are and the impact products have beyond their intended purpose. Produce a detailed step-by step plan. Suggest some alternative plans and say what the good points and drawbacks are about each. Explain how their product will appeal to the user. <b>Working with tools, materials and components to make quality products</b> Select appropriate materials, tools and techniques for cutting, shaping, joining and finishing, accurately. Use skills in using different tools and equipment safely and accurately.</p>

			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			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. Combine components and materials in different ways with accuracy. Use more complex components to create functional products and begin to use ICT to control mechanisms. Demonstrate motivation, resilience and perseverance to refine and improve their products Use a variety of finishing techniques to strengthen and improve the appearance of their product ensuring a good quality finish. <b>Evaluating Processes and Products</b> Evaluate a product against the original design specification and by carrying out appropriate tests. Evaluate their work both during and at the end of the assignment and seek evaluation from others. Evaluate appearance and function against original criteria. <b>Vocabulary</b> cam rotation spindle driver follower handle system round egg-shaped ellipse eccentric snail hexagon action
6	<p><b>A Child's War DT Food</b> Find and make popular wartime foods. Collect and preserve fruits, make jam, pickles, eggless sponge cake, Woolton pie, apple crumble and spam fritters. Find out what children might have eaten during the course of a single week.</p> <p>Explain how ingredients are grown, reared and caught. Understand that seasons may affect the availability of food and what types of food are seasonal in Britain</p> <p>Prepare and cook a variety of predominantly savoury dishes</p>	<b>Darwin's Delights ART</b>	<b>Frozen Kingdom ART</b>	<b>Tomorrow's World DT</b> Significant individuals, website design, design, make and evaluate robotic devices. <b>Developing , Planning and Communicating</b> Communicate their ideas through detailed labelled drawings Develop a design specification Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways	<b>Gallery Rebels DT ART</b> <b>Whole School focus on Textiles – Theme TBC</b>	<b>Hola Mexico DT/FOOD</b> Food of Mexico

	<p>safely and hygienically including with the use of a heat source. Confidently use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. Know different food and drink contain different substances that are needed for health. Use appropriate tools and equipment, weighing and measuring accurately. Consider the costs (financial and environmental) when planning a healthy and affordable meal</p> <p><b>Vocabulary</b> 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</p>			<p>Plan the order of their work, choosing appropriate materials, tools and techniques</p> <p><b>Working with tools, materials and components to make quality products</b></p> <p>Aim to make and to achieve a quality product, making modifications as they go.</p> <p>Combine and assemble complex electrical circuits and components to create functional products and use ICT to control them. Make decisions and select and combine the most appropriate mechanical systems for a particular purpose. Demonstrate independence, teamwork, motivation, resilience and perseverance to refine and improve their products.</p> <p>Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment</p> <p><b>Evaluating Processes and Products</b></p> <p>Evaluate their products in relation to purpose, user and function, identifying strengths and areas for development and carrying out appropriate tests. Evaluate their work continuously both during and at the end of the assignment and frequently seek evaluation from others. Record their evaluations using drawings with labels.</p> <p><b>Vocabulary</b></p> <p>tilt switch bulb (holder) battery (holder) wire insulator conductor crocodile clip control program system input device output device series circuit parallel circuit</p>		
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