

Year: 3/4 Subject: D.T		Topic Question/Title: Food Glorious Food! Celebrating culture and seasonality.		Term - Autumn 2	Curriculum - B 
Prior Knowledge Children in year 1/2 know some ways to prepare ingredients safely and hygienically. They have some basic knowledge and understanding about healthy eating and The Eatwell plate. They have used some equipment and utensils and prepared and combined ingredients to make a product.		Key Vocabulary texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury.		Outcome Designing, making and evaluating a bread based product with a filling for lunch, such as a wrap, a sandwich, a roll, a blini or a toastie.	
Future Learning In year 5/6 the children will continue their learning on seasonality and healthy food products. The children will look in more detail at healthy eating. The children will design, make and evaluate their own bread-based product.		Stimulus Taste testing a variety of different products. First hand experiences (enrichment) Taste testing a variety of different products.		World of Work Nutritionist, dietician, farmer	
National Curriculum PoS <u>Design</u> 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 Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design <u>Make</u> 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. <u>Evaluate</u> 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 Understand how key events and individuals in design and technology have helped shape the world. <u>Cooking and Nutrition.</u> - Understand and apply the principles of a healthy and varied diet - Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques - Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.		Key Knowledge Evaluating - Carry out sensory evaluations of a variety of ingredients and products. Record the evaluations using e.g. tables and simple graphs. - Evaluate the ongoing work and the final product with reference to the design criteria and the views of others. Technical knowledge and understanding - Know how to use appropriate equipment and utensils to prepare and combine food. - Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught. - Know and use relevant technical and sensory vocabulary appropriately.		Possible evidence Children investigate a range of food products e.g. the content of their lunchboxes over a week, a selection of foods provided for them, food from a visit to a local shop. Link to the principles of a varied and healthy diet using The eatwell plate e.g. What ingredients have been used? Which food groups do they belong to? What substances are used in the products e.g. nutrients, water and fibre? Carry out sensory evaluations on the contents of the food from e.g. a variety of bought food products such as a range of wraps or sandwiches. Record results, for example using a table. Use appropriate words to describe the taste/smell/texture/appearance e.g. How do the sensory characteristics affect your liking for the food? Gather information about existing products available relating to your product. Visit a local supermarket and/or use the internet. Find out how a variety of ingredients used in products are grown and harvested, reared, caught and processed e.g. Where and when are the ingredients grown? Where do different meats/fish/cheese/eggs come from? How and why are they processed?	
		Application of Key Skills		Possible evidence	
		Designing - Generate and clarify ideas through discussion with peers and adults to develop design criteria including appearance, taste, texture and aroma for an appealing product for a particular user and purpose. - Use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas. Making - Plan the main stages of a recipe, listing ingredients, utensils and equipment. - Select and use appropriate utensils and equipment to prepare and combine ingredients. - Select from a range of ingredients to make appropriate food products, thinking about sensory characteristics.		Learn to select and use a range of utensils and use a range of techniques as appropriate to prepare ingredients hygienically including the bridge and claw technique, grating, peeling, chopping, slicing, mixing, spreading, kneading and baking. Food preparation and cooking techniques could be practised by making a food product using an existing recipe. Discuss basic food hygiene practices when handling food including the importance of following instructions to control risk e.g. What should we do before we work with food? Why is following instructions important?	

Year: 3/4 Subject: D.T PoS: Textiles		Topic Question/Title: Perfect Pencil Cases	Term – Spring 2	Curriculum - B
Prior Knowledge In year 1/2 children have: joined fabric in simple ways by gluing and stitching, have used simple patterns and templates for marking out and have evaluated a range of textile products.		Key Vocabulary fabric, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance	Outcome To design, make and evaluate a pencil case.	
Future Learning In 5/6 children will look at combining different fabric shapes using a range of different stitching and fastening techniques. They will look at how a 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics. In addition, how fabrics can be strengthened, stiffened and reinforced where appropriate.		Stimulus Link to French (things in the classroom). First hand experiences (enrichment) Making and stitching a pencil case.	World of Work Clothes designer, seamstress, designer.	
National Curriculum PoS <u>Design</u> - 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 - Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design <u>Make</u> - 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, textiles and ingredients, according to their functional properties and aesthetic qualities <u>Evaluate</u> - 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 - Understand how key events and individuals in design and technology have helped shape the world <u>Technical knowledge</u> - apply their understanding of how to strengthen, stiffen and reinforce more complex structures	Key Knowledge		Possible evidence	
	Technical knowledge and understanding - To know how to strengthen, stiffen and reinforce existing fabrics. - To understand how to securely join two pieces of fabric together. - To understand the need for patterns and seam allowances. - To know and use technical vocabulary relevant to the project. - To understand how a key event/individual has influenced the development of the chosen product and/or fabric.		Children investigate a range of textile products that have a selection of stitches, joins, fabrics, finishing techniques, fastenings and purposes, linked to the product they will design, make and evaluate. Think about products from the past and what changes have been made in textile production and products e.g. the invention of zips and Velcro. Give children the opportunity to disassemble appropriate textiles products to gain an understanding of 3-D shape, patterns and seam allowances. Provide a range of fabrics – children to consider whether fabrics are suitable for the chosen purpose and user. The fabrics also can be used for demonstrating and testing out a range of decorative finishing techniques e.g. appliqué, embroidery, fabric pens/paints, printing.	
	Application of Key Skills		Possible evidence	
	Designing - To generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user/s. - To produce annotated sketches, prototypes, final product sketches and pattern pieces. Making - To plan the main stages of making. - To select and use a range of appropriate tools with some accuracy e.g. cutting, joining and finishing. - To select fabrics and fastenings according to their functional characteristics e.g. strength, and aesthetic qualities e.g. pattern. Evaluating - To investigate a range of 3-D textile products relevant to the project. - To test their product against the original design criteria and with the intended user. - To take into account others’ views.		Allow children to use a textile product they have taken apart to create a paper pattern using 2-D shapes. Children to create a design brief, supported by the teacher, set within a context which is authentic and meaningful. Discuss the intended user, purpose and appeal of their product. Create a set of design criteria. Ask children to sketch and annotate a range of possible ideas, constantly encouraging creative thinking. Produce mock-ups and prototypes of their chosen product. Plan the main stages of making e.g. using a flowchart or storyboard. Children to assemble their product using their existing knowledge, skills and understanding from IEAs and FTs. Encourage children to think about the aesthetics and quality finish of their product. Evaluate as the process is undertaken and the final product in relation to the design brief and criteria. The product should be tested by the intended user and for its purpose and others’ views sought to help with identifying possible improvements.	

Year: 3/4 Subject: D.T PoS: Mechanical Systems		Topic Question/Title: Inspiring inventors		Term – Summer 2	Curriculum - B 
<u>Prior Knowledge</u> Explored and used mechanisms such as flaps, sliders and levers. Gained experience of basic cutting, joining and finishing techniques with paper and card.			<u>Key Vocabulary</u> mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output.		<u>Outcome</u> To design, make and evaluate a moving poster for families for recycling.
<u>Future Learning</u> In 5/6 children will undertake another unit of work. They will look at pulleys and gears. The children in here will investigate, design and make a product using gears and pulleys. They will use construction kits to explore how different combinations will effect the movement and investigate the speed and direction of rotation. They will communicate ideas through detailed, annotated drawings from different views and/or exploded diagrams. They will also produce detailed step-by-step plans and lists of tools, equipment and materials needed. If appropriate allocate tasks within a team.			<u>Stimulus</u> Environmental campaign- cross curricular- Geography- improving our local environment. <u>First hand experiences (enrichment)</u>		<u>World of Work</u> Car designer, mechanic, engineer
<u>National Curriculum PoS</u> <u>Design</u> 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. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. <u>Make</u> 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, textiles and ingredients, according to their functional properties and aesthetic qualities <u>Evaluate</u> 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 Understand how key events and individuals in design and technology have helped shape the world <u>Technical knowledge</u> Apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]		Key Knowledge		Possible evidence	
		<u>Evaluating</u> - Investigate and analyse books and, where available, other products with lever and linkage mechanisms. - Evaluate their own products and ideas against criteria and user needs, as they design and make. <u>Technical knowledge and understanding</u> - Understand and use lever and linkage mechanisms. - Distinguish between fixed and loose pivots. - Know and use technical vocabulary relevant to the project.		Demonstrate a range of lever and linkage mechanisms to the children using prepared teaching aids. - Use questions to develop children’s understanding e.g. Which card strip is the lever? Which card strip is acting as the linkage? Which part of the system is the input and which part the output? What does the type of movement remind you of? Which are the fixed pivots and which are the loose pivots? - Demonstrate the correct and accurate use of measuring, marking out, cutting, joining and finishing skills and techniques. - Children should develop their knowledge and skills by replicating one or more of the teaching aids - Evaluate the final products against the intended purpose and with the intended user, drawing on the design criteria previously agreed	
		Application of Key Skills		Possible evidence	
		<u>Designing</u> - Generate realistic ideas and their own design criteria through discussion, focusing on the needs of the user. - Use annotated sketches and prototypes to develop, model and communicate ideas. <u>Making</u> - Order the main stages of making. - Select from and use appropriate tools with some accuracy to cut, shape and join paper and card. - Select from and use finishing techniques suitable for the product they are creating.		Develop a design brief with the children within a context which is authentic and meaningful. - Discuss with children the purpose of the products they will be designing and making and who the products will be for. Ask the children to generate a range of ideas, encouraging creative responses. Agree on design criteria that can be used to guide the development and evaluation of the children’s products. - Using annotated sketches and prototypes, ask the children to develop, model and communicate their ideas. - Ask the children to consider the main stages in making before assembling high quality products, drawing on the knowledge, understanding and skills learnt through IEAs and FTs.	