DT Curriculum Coverage: LKS2

Expected Vocabulary. NC Objectives. Intended activities.

These skills/activities can be taught weekly or in a block as appropriate to the unit.

Topic and Year	National Curriculum Objective	Knowledge/Activity	Vocabulary
Year 3 Autumn **When was the Stone Age?** TEXTILES	Investigate and analyse a range of existing products. 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 and pattern. 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 textiles, according to their functional properties and aesthetic qualities. Evaluate their ideas and products against their own design criteria and consider the views of others to improve the final outcome.	Textiles focus – making a Christmas gift. Investigate different types of existing items that use stitching as decoration. Develop design criteria. Decide on initial design based on materials and decorations available. Practise sewing techniques (running stitch, back stitch, diagonall stitch and cross stitch) Learn how patterns are used and create own pattern . Evaluate / annotate / alter design based on knowledge gained from above. Create final piece (sewing afternoon with parent helpers if possible). Evaluate. Gift wrap for presentation as a Christmas gift.	Aesthetics adornment **decoration** **Functionality** **Product** **quality** specification **running stitch** back stitch blanket stitch cross stitch **Job – seamstress/designer/ toymaker**
Spring **Where in the world is the UK?** COOKING	Understand how key events and individuals in design and technology have helped shape the world in the context of the history behind Warburtons. Investigate and analyse existing products. 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.	History/geography link - Investigate the history of Warburtons in the UK. Evaluate existing products according to their characteristics (Different types of Warburtons bread: Milk Roll, Toastie, Seeded Batch, Fruit Loaf with Orange). Discuss the ingredients with links to food groups/diet and the process of the ingredient being grown to being used to make the product e.g wheat.	**Dough** **Knead** **Sift** Baking powder Baking soda **Yeast** **Manufacture** **Job – baker/chef**

	Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. 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 in the context of creating a design criteria for a new type of bread. Select from and use a wider range of tools and equipment to perform practical tasks for example shaping accurately in the context of shaping salt dough. 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. 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. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.	Develop design criteria and practise shapes with salt dough. Think of original ideas for a product based on design criteria. Develop design and communicate it. Make own bread to take on school trip as part of lunch / link to British company (Warburtons). Use cooking skills to make final product and evaluate.	
Summer Why did the Ancient Egyptians build the pyramids? MECHANISMS	Understand and use mechanical systems (ie levers). 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. Investigate and analyse a range of existing products. Understand how key individuals and events in DT have helped shape the world.	Introduce the purpose of levers and investigate different examples of first class levers. Label photographs of the examples shown. Investigate levers through raising a book using different sizes and lengths of spoon (see saw). Link back to previous learning in science about forces. Investigate where effort is best applied to create most movement using sticks and bags of stones or lego. History link - Look at video of shadufs in Ancient Egypt. Design and label own shaduf, choosing from given materials.	Mechanism Lever (first class) Pulley Model Structure Attach Fulcrum Load Effort Job – architect/builder

	Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.	Focus on correct placement of fulcrum and load. Follow a step by step plan, choosing the right equipment and materials. Make and test shaduf – identify where effort is best placed and annotate on diagram. Evaluate by testing with a load. Encourage children to keep looking for levers – keep a class list of where they have been seen, what they are used for and which type of lever they are.	
Topic and Year	National Curriculum Objective	Knowledge/Activity	Vocabulary
Autumn **What myths and legends did the Ancient Greeks tell us?** CONSTRUCTION	Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. 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. Investigate and analyse a range of existing products. Understand how key events and individuals have helped shape the world. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. 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. Select from and use a wider range of tools and equipment to perform practical tasks.	History/Geography link – Ancient Greeks. Look at Greek constructions/inventions – research what a temple looked like and label the parts. Identify how this has survived today and is a tourist attraction – Parthenon temple for the goddess Athena in Athens using Google Earth. Create design criteria for their own temple model for a different god by looking at existing designs from historical sources and modern day structures. Consider how to make it appealing for the god and to look at. Sketch their design using annotations. Draw the structure and explain the parts. Discuss how they could create a strong structure using the materials and then reinforce it during the making process. Children to test out ways to strengthen it then add to their product. Create their model using cardboard and cardboard tubes.	**Parthenon/temple** **Columns** **Capital** **Frieze** **pediment** Structure Strengthen Stiffen **Stable** Reinforce Functional Construction Product Design Sketch Make Evaluate Model Attach **Job – architect/engineer**

	Evaluate their ideas and products against their own design criteria and consider the views of others to improve their own.	Evaluate their product against the design criteria.	
Spring **What can be found in eastern Europe?** COOKING	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. Select from and use a wider range of materials and components, including …ingredients according to their functional properties and aesthetic qualities. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.	Geography link to European country. Explain why many families ate and still eat goulash. Look at recipe and ingredients (taste test before). Where in the world are the ingredients from? How is the stew cooked and why? Is it healthy? Look at the eat well plate and identify the different food groups that make a healthy and varied diet. Discuss the different benefits of food groups for the body and staple foods such as rice/potatoes. Science link to digestion from Autumn 1 – nutritional benefits for body parts. Learn about foods that are in season at different times of the year and use foods that are ready at this time. Discuss how other foods such as meat is processed. Children to make an existing goulash dish – children could make improvements to include the food groups and seasonal ingredients. 1. Working in small groups children to weigh and prepare the ingredients. Focus on hygiene with particular reference to preparing raw meat. (a vegetarian option available as appropriate). 2. Cook the stew in slow cookers. Place in fridge overnight (best left for 1 day for flavours to develop) then reheat and eat with slice of bread.	**Diet** Hygiene Savoury **Ingredients** Seasonal produce **Food groups/**Food pyramid/eat well plate Fresh/processed **Stew**/boil/ simmer Heat/boil/cool Appetising Flavoursome **nutritional** **Hygiene** Vegetarian **Job – chef, dietician**

		Children to taste test and evaluate their goulash.	
Summer **How do we know the Romans were in Britain?** ELECTRICAL SYSTEMS –	Understand and use electrical systems in their products. Apply their understanding of computing to program, monitor and control their products. 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. 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. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.	Science link – electricity. Look at existing products/inventions using electrical circuits from the past and current day – link to science learning to identify the electrical components. Children to design and make their own 3D model (cross curricular links made to practise skills in science/computing such as lighthouse) and create a simple circuit. Evaluate by testing their electrical system. Computer link – use Flowol programme to control the lights.	**Electrical components** Bulb/buzzer/motor/battery wires/switch **circuit** control program **Job – electrician, engineer.**