Badger Hill PRIMARY SCHOOL

DT Long Term Plan Year Three 2023-24

	Autumn Term (Autumn 1)	Spring Term-A Wonderful World	Summer Term-Back to the Future
Topic	**Shell Structures: Chocolate Boxes (2D shape to 3D product, including CAD)**	**Textiles: Plant Pot**	**Cooking and Nutrition: Eating Seasonally.**
Sticky Knowledge	To understand that flat and wide is a good base for a structure. To use words stiff and strong. To know that a façade is the front of a structure. To know a 2D shape can become a 3D structure using nets. To know that scoring is scribing the card along a line so that it is easier to fold. To know that computer-aided-design is using programs on a computer to help with deign. To know that nets need tabs to join to become 3D structures.	To know that a seam allowance is the extra fabric allowed for joining – usually 1.5cm. To know that applique - means 'applied' - describes method of stitching/gluing patches onto fabric provide decoration. To know that there are different ways of joining materials (sewing, gluing). To know how to use different sewing techniques – back stitch, running stitch, overstitch and which is the most appropriate To know that a pattern is - a shape drawn to exact shape and size and used to assist cutting out.	To name fruit and vegetables which cannot be grown in the UK due to the climate. To talk about different climates –hot/cold/dry/we and what this means for the type of vegetables that can be grown. To know that the environment is affected by importing food (food miles, pollution, sustainability) To talk about preparing food surfaces carefully and safely. To know how to cut using the bridge and claw method.
Vocabulary	Appealing, 2D, 3D, packaging, shell structure, design, net, scoring, shape, stable, stiff, strong, tab, font	recyclable, applique, seam allowance, pattern, template, running stitch, back stitch, overstitch, functional	Climate, diet, imported, ingredients, natural, processed, reared, recipe, seasonal, food miles, pollution, bridge method, claw method.
Suggested Tasks	**Wow-** Introduce chocolate manufacturers. Look at a variety of different chocolate boxes available to the public. What do they have in common? What do you like about them? What makes you want to buy them? Introduce the letter from Nestle that contains the brief. **Design-** Look at different nets and choose the one you want for your design. On a paper net, design the chocolate box, thinking carefully about the target customer. **Make-** Use CAD (google drawings) to put the design onto the net. Print onto A3 card and then cut out, score and join! **Evaluate-** Evaluate against the brief and success criteria. Celebrate by filling the box with chosen chocolates!	**Wow-** Share a selection of fabric plant pots with the class. Which one would they buy and why? What do we need to consider when designing a plant pot? Introduce the brief from Dobbie's Garden Centre. **Design-** Practice different sewing techniques. Look at different materials, thinking about which we will use for the inside vs for the outside of the pot. Put design onto paper. **Make-** Follow design requirements to make a fabric plant pot. Think about aesthetics and functionality. **Evaluate-** Evaluate against brief and success criteria. Put in own spider plants!	**Wow-** Create a tasting session matching vegetables to different countries. Why are some vegetables more expensive or only available at certain times of the year? Discuss sustainability and food miles. **Design-** Use all senses to design a seasonal savoury tart! **Make-** Follow a recipe, which they have created, and make the tart! **Evaluate-** Use the brief and design criteria to evaluate the tart. Hold a tasting café and receive feedback!
Skills linked to outcomes	**Design** Designing a chocolate box with key features to **Make** Constructing 3D geometric shapes using nets. **Evaluate** Evaluate existing chocolate boxes. **Technical (knowledge)** To understand that wide	**Design** Developing and designing a plant pot, which has two layers; fabric, **Make** Using a template when cutting and assembling the plant pot. **Evaluate** Analysing and evaluating **Technical (knowledge)**	**Design** Creating a healthy and nutritious recipe for a **Make** Knowing how to prepare themselves **Evaluate** Evaluate a range of existing tarts available to **Technical (knowledge)** To know that not all fruit and

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	appeal to a specific person/purpose Drawing and labelling a chocolate box on paper (3D) before transferring it to the computer and using CAD to make the design 'real'. Designing the chocolate box on google drawing thinking carefully about the font, colours and features of a chocolate box e.g. barcode, recyclable label.	Creating special features for individual designs Making the façade of the chocolate box using CAD. Assembling the box using scoring techniques and making the joins stiff and strong using joining materials (e.g. double sided tape)	Evaluating own work and the work of others based on the aesthetic of the finished product and in comparison to the original design. Suggesting points for modification of the individual designs.	and flat based objects are more stable To understand the importance of strength and stiffness in structures. To know the features of a chocolate box e.g. barcode, nutritional information, recyclable logo, weight in grams etc. To know that a facade is the front of a structure To know that tabs are needed to join nets to make 3D structures. To know that a paper net is a flat 2D shape that can become a 3D shape once assembled	aesthetic outside and a waterproof, functional inside. Designing a piece of applique to go on the outside of the plant pot. Selecting materials and designs, which are functional and realistic. Making and following a pattern with a seam allowance.	Following a list of design requirements. Selecting and using the appropriate tools and equipment for cutting, joining, shaping and decorating a foam pouch. Applying functional features such as using foam to create soft buttons.	existing plant pots. Identifying the key features of a plant pot and its functionality.		savoury tart using seasonal ingredients, considering the taste, texture, smell and appearance.	and a work space to cook safely in, learning the basic rules to avoid food contaminati on. Following the instructions within a recipe. Using the claw and bridge cutting techniques.	the public already, looking at ingredients etc. Establishing and using design criteria to help test and review dishes. Describing the benefits of seasonal fruits and vegetables and the impact on the environment Suggesting points for improvemen t when making a seasonal tart.	vegetables can be grown in the UK To know that climate affects food growth To know that vegetables and fruit grow in certain seasons To know that cooking instructions are a recipe To know that imported food is brought in from another country To know that exported food is sent to other countries. To know that imported food can affect the environment (food miles,

				To know that a design specification is a list of success criteria for a project								sustainability) To know that fruit and vegetables give us nutritional benefits and why they are important to us. To know safety rules for storing knives. To know that similar coloured fruit and vegetables often have similar nutritional benefits.
Assessment Opportunities	Use the quiz at the beginning and end of the unit. Adapt the knowledge catcher to suit the needs/outcomes of your class. Use as part of the evaluation within the unit.				Use the quiz at the beginning and end of the unit. Adapt the knowledge catcher to suit the needs/outcomes of your class. Use as part of the evaluation within the unit.				Use the quiz at the beginning and end of the unit. Adapt the knowledge catcher to suit the needs/outcomes of your class. Use as part of the evaluation within the unit.			

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Previous and Past learning experiences	**Why this topic now? This topic follows on from Y1 topic Cooking and Nutrition: Fruit and Vegetables** **Next Steps Learning:** What could be healthier? (Y5)	**Why this topic now? This is a new topic** **Next Steps Learning:** Navigating the World (Y6)	**Why this topic now? This topic follows on from Y2 Baby Bear's Chair** **Next Steps Learning:** Pavilions (Y4) Playgrounds (Y6)
National Curriculum Links	Understand and apply principles of a heathy 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, caught and processed.	Generate, develop, model and communicate their ideas through talking, drawing, templates, mock- ups and, where appropriate, information and communication technology. 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 Evaluate their ideas and products against design criteria. Understand how key events and individuals in design and technology have helped shape the world Apply their understanding of computing to program, monitor and control their products	Design purposeful, functional, appealing products for themselves and other users based on design criteria. 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 talking, drawing, templates, mock- ups and, where appropriate, information and communication technology. Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]. Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. Evaluate their ideas and products against design criteria. Evaluate a range of existing products Explore and use mechanisms in their products Investigate and analyse a range of existing products Apply their understanding of how to strengthen, stiffen and reinforce more complex structures