

DT Year 2 Autumn 2 Theme: Bread Strand: Food Technology		Learning in this topic: TECHNICAL KNOWLEDGE: Develop the creative, technical and practical expertise needed to perform everyday tasks confidently Understand health and hygiene before baking bread. Discuss the importance of washing hands before baking.			
NC objectives covered:	Design purposeful, functional, appealing products for themselves and other users based on design criteria Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria	DESIGN AND MAKE: build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users Explore a selection of breads that are readily available to buy. Evaluate the appearance, texture, smell and taste and describe likes and dislikes. Use their experience of bread to design some ideas for new bread rolls . Thinking about what will happen as the bread is baked. Choose a final design and describe the design with reasons for choices. EVALUATE: critique, evaluate and test their ideas and products and the work of others (including in the real world) Taste their own bread. Evaluate their final product . What has gone well, what would they change next time?			
Prior Knowledge needed:	What food group bread belongs to The importance of food hygiene (hand washing)	Understand and apply the principles of nutrition and learn how to cook. Discuss which food group bread can be found in.			
Curriculum Concepts and Themes:	Food Technology	Curriculum Skills Progression:	Use knowledge of a range of products to inform plans and designs. Talk in depth about ideas, plans and reasons for choices. Follow procedures for safety and hygiene. Investigate and compare a range of similar existing products. Compare and contrast the similarities and differences of products with the same function. Evaluate ideas and products against design criteria; and suggest ways in which products can be improved. Sort and classify food into food groups. Measure and weigh accurately using cups and spoons. Work safely and hygienically. Talk about what needs to be done in order to work safely and hygienically. Measure and weigh using standard units scales.	Direct links to made other subjects:	History – Great Fire English – Instructions Maths – Measures Science – Hygiene and changes in state (materials)
Inspirational Start: (hook to capture the imagination) Bread tasting to focus on the range of bread and designs available.		Mid-way Milestone: Click or tap here to enter text.		Extraordinary End: (a recognised end point to work towards) Making bread to match own design.	

DT		Year 2		Spring 2	
Theme: Puppets Strand: Textiles		Learning in this topic: TECHNICAL KNOWLEDGE: Develop the creative, technical and practical expertise needed to perform everyday tasks confidently To understand how different puppets work. To understand what a running stitch is. To practice sewing to join two pieces of fabric together.			
NC objectives covered:	<ul style="list-style-type: none"> select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] explore and evaluate a range of existing products evaluate their ideas and products against design criteria 	DESIGN AND MAKE: build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users Explore a selection of a wide range of puppets (hand puppets, shadow puppets, rod/stick puppets, finger puppets, marionette). Evaluate the appearance, texture, operation and design . Discuss similarities and differences . Describe likes and dislikes . Use their experience of puppets to design some ideas for a new hand puppet . Thinking about the character they want to create and what extra materials they will need to use (beads, sequins, pipe cleaners, wool) and how they will be fastened onto the puppet. Create a final design and describe the design with reasons for choices. Sew a hand puppet using a simple running stitch . EVALUATE: critique, evaluate and test their ideas and products and the work of others (including in the real world) Evaluate their final product . What skills have they learned? What did they find easy ? What was difficult about creating their final product? What has gone well, what would they change next time? Understand and apply the principles of nutrition and learn how to cook. N/A			
Prior Knowledge needed:	<ul style="list-style-type: none"> Understanding what a puppet is. Knowledge of how different puppets work. Know a range of Traditional Tales. Safety with sewing needles. 				
Curriculum Concepts and Themes:	Textiles	Curriculum Skills Progression:	Use knowledge of a range of products to inform plans and designs. Talk in depth about ideas, plans and reasons for choices. Select and use an increasing range of tools to cut and join a range of materials. Select and use an increasing range of tools to cut, shape and join materials and components. Use a ruler to measure and mark lines for cutting. Select an appropriate way to improve the appearance of a product. Talk about and begin to select textiles based on characteristics of an increasing range of materials. Use a simple template. Join fabrics using glue, stapes and thread. Apply an increasing range of finishing techniques. Cut and join fabrics using running stitch, buttons and bond web. Decorate fabric by applying beads and sequins.	Direct links to made other subjects:	English – Non-fiction writing about animals from Kiribati. English - instructions Maths – Matching halves Art – designing a character
Inspirational Start: (hook to capture the imagination) Exploration of existing puppets.		Mid-way Milestone: Create, by sewing, a hand puppet.		Extraordinary End: (a recognised end point to work towards) To create a story involving all the puppets made by a group children.	

DT		Year 2		Summer 2					
Theme: Alarm systems Strand: Electrical and Mechanical components		Learning in this topic: TECHNICAL KNOWLEDGE: Develop the creative, technical and practical expertise needed to perform everyday tasks confidently To understand what electricity is. To understand electrical safety . To understand how electricity travels without mains. To be able to name a variety of electrical items and explain how and why they work. To know what alarms are and why they are needed. To be able to name a variety of alarms and explain how and why they work. DESIGN AND MAKE: build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users. Explore a selection of common electrical equipment and discuss how it works. Explore a selection of alarms (school bell, fire bell, smoke alarm, etc...) Evaluate how it works (noise, light, movement etc...) Discuss situations when alarms might be needed. Which type of alarm would be best for each situation. Make and explore simple electrical circuits including switches and buzzers . Discuss how circuits can be controlled . Use experience from previous lessons to design an electrical circuit to power an alarm system (labelled sketches and written instructions). Create a prototype of the alarm case (paper nets) to see how the circuit will be protected and secured. Create a wooden alarm case to house the electrical circuit. EVALUATE: critique, evaluate and test their ideas and products and the work of others (including in the real world) Evaluate the prototype to see if the alarm system will work. Made adaptations based on their evaluation. Evaluate their final product . What skills have they learned? What did they find easy ? What was difficult about creating their final product? What has gone well, what would they change next time? Understand and apply the principles of nutrition and learn how to cook. N/A for this topic.							
NC objectives covered:	<ul style="list-style-type: none"> design purposeful, functional, appealing products for themselves and other users based on design criteria 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] evaluate their ideas and products against design criteria build structures, exploring how they can be made stronger, stiffer and more stable 	Prior Knowledge needed:	<ul style="list-style-type: none"> An understanding of what electricity is. An understanding of how electricity travels. An understanding of how electricity can power objects. 	Curriculum Concepts and Themes:	<ul style="list-style-type: none"> Electrical and mechanical components. 	Curriculum Skills Progression:	<ul style="list-style-type: none"> Use simple prototypes, labelled sketches and detailed instructions in plans and designs. Select materials and components according to known characteristics and functions. Make and use gluing tabs. Make simple paper models, mock-ups and templates. Compare and contrast the similarities and differences of products with the same function. Evaluate ideas and products against design criteria; and suggest ways in which products can be improved Use remote controlled devices, e.g. a remote-controlled vehicle, Bee bot etc Talk about how common electrical equipment works, e.g., kettle, telephone, and microwave. Talk how equipment can be used safely. Create a simple circuit using a battery, bulb and wires. Describe how a simple battery powered circuit can be controlled by different kinds of switches. Talk about simple electrical safety. Create simple circuits incorporating a battery, bulb, switch, buzzer and wires. 	Direct links to made other subjects:	<ul style="list-style-type: none"> English – Beegu story and Mousetronaut story Maths – 3D nets Science – Electricity History – Space travel
Inspirational Start: (hook to capture the imagination) <ul style="list-style-type: none"> UFO crash landing on the field. 		Mid-way Milestone: <ul style="list-style-type: none"> Create and explore electric circuits with buzzers and lights. 		Extraordinary End: (a recognised end point to work towards) <ul style="list-style-type: none"> Create an alarm including a buzzer or light as a warning system. 					