

Design and Technology – Curriculum Overview

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	<u>Food Technology</u> In this unit, children will play and experiment with creating a range of batters and doughs following simple instructions using weighed out ingredients. They will omit and combine other ingredients to see the effect that it has on the finished product. They will experiment with cutting, slicing, moulding and making imprints in those different doughs and batters. They will observe and discuss similarities and differences. They will also explore a range of fruits taking part in peeling, cutting soft fruits, squashing, mashing and will describe smells, tastes, textures, colours... They will identify similarities and differences between them, including comparing different types of apples, citrus fruits etc. They will express preferences and begin to appreciate how they and others might agree or disagree.		<u>Mechanisms</u> In this unit, children will experiment with a range of different mechanism to make movements as well as different joining materials such as tape, paper fasteners, treasury tags, elastic bands etc. Through access to materials and simple tools, children will use their imaginations to explore and create simple builds for their own specific purposes. They will play with shape and try to copy some simple things such as hinges.		<u>Structures</u> In this unit, children will experiment with a range of different materials as well as different joining materials such as tape, paper fasteners, treasury tags, elastic bands etc. to create structures. Through access to materials and simple tools, children will use their imaginations to explore and create simple builds for their own specific purposes. They will play with shape and try to copy some simple things such as hinges.	
1		<u>Mechanisms</u> In this unit, children will create a Christmas card that includes a simple lever and slider. They will explore a variety of different sliders and levers through pop-up stories. They will play with strips and fasteners to create a range of movements copying disassembled real ones and investigating their own. They will use their findings to create a card with appropriate movement.		<u>Food Technology</u> In this unit, children will learn how to make fruit salad kebabs focusing on preferences as well as combinations of colour, taste and flavour. They will explore a variety of different fruits observing and discussing their similarities and differences. They will smell and taste a range of fruits expressing their opinions through smell, taste, texture etc and will learn where those fruits come from. They will follow simple instructions to prepare some fruits in a variety of ways and will form them together into a fruit kebab that they will taste and evaluate. They will begin to learn about the Eatwell plate and that we should be eating at least five portions of fruit or vegetables a day. They will learn some simple hygiene rules. Use Oliver's Fruit Salad by Vivian French.		<u>Structures</u> In this unit, children will research and make a chair for the three bears from Goldilocks. They will explore a variety of different chairs in their environment and through images/video and identify what makes a chair a chair. They will consider differences and what the requirements will be for the three bears e.g. they are different sizes. They will experiment with cutting and joining a range of junk materials to explore strengthening their products, including considering shapes such as triangles through exploring e.g. Blackpool Tower. They will design and build their chair, talk about it, including any issues they may have met and evaluate their product.

2		<u>Food Technology</u> In this unit, children will learn how to make healthy fruit and vegetable smoothies cutting harder fruits and vegetables. They will explore a variety of different fruits observing and discussing their similarities and differences. They will smell and taste a range of fruits expressing their opinions through smell, taste, texture etc and will learn where those fruits come from. They will begin to learn about the Eatwell plate and that we should be eating at least five portions of fruit or vegetables a day. They will learn some simple hygiene rules.		<u>Mechanisms</u> In this unit, children will create a moving vehicle for a purpose with wheeled axles. They will explore the purpose of a variety of different vehicles such as diggers, delivery vans, forklift truck etc. They will play with and disassemble vehicles, looking at the axles of their wheels (fixed and freely moving) and then design and make a moving vehicle for a purpose.		<u>Textiles</u> In this unit, children will design and make a glove puppet that fits their own hand using a running stitch. They will explore a range of different puppets evaluating their appeal and the way they have been made. If possible, turn them inside out to consider seam allowance. This could be done with their jumper. They will design a character for a glove puppet, create a template by drawing around their hand and apply that template to fabric. They will evaluate their product against their original brief.
3	<u>Structures</u> In this unit, children will research, design and make a shell structure to house and transport a historical artefact for a museum. They will explore a variety of shell structures by researching, taking apart and playing with different elements. They will explore nets using construction materials and refine ways of joining materials together. They will consider strengthening as well as overall shapes and ways of providing extra protection e.g. bubble wrap.			<u>Textiles</u> In this unit, children will design and make a purse/wallet for a user to hold something e.g. coins/phone/trinkets including a seam allowance. They will explore several stitches that can be used to create a wallet/purse container and consider who the user will be adding details to please them. They will explore and include a seam allowance and turn their finished product inside out to give a professional finish. They will design, make and evaluate their work accurately.		<u>Food Technology</u> In this unit, children will learn how to make pitta pockets focusing on their choice of ingredients, explaining their ideas using taste, texture, experiences... They will build on their knowledge of the Eatwell plate to explore the importance of each section and why the sections are different sizes. Expressing their preferences over food choices, children will design and create a pitta pocket thinking about visual appeal, taste, texture etc. They will follow hygiene rules and use tools safely to prepare their ingredients and combine them to make an appealing pitta pocket. They will taste and evaluate their product following agreed criteria.

4		<u>Mechanisms</u> In this unit, children will design and make a three-dimensional model animal using a pneumatic element. They will explore a range of real-world examples that use pneumatics including using video. They will identify the different components and work to design and create their model of an animal. This could be a model for a new science show to explore how animals move.		<u>Food Technology</u> In this unit, children will learn how to make vegetable couscous. They will build on their knowledge of where food comes from exploring things like rearing and catching animals as well as furthering their knowledge of growing produce. They will also explore how fibre plays a vital role in digestion, linked to their science. the Eatwell plate to explore the importance of each section and why the sections are different sizes. Expressing their preferences over food choices, children will design and create a vegetarian couscous meal thinking about visual appeal, taste, texture etc. They will follow hygiene rules and use tools safely to prepare their ingredients and combine them to make an appealing couscous dish. They will taste and evaluate their product following agreed criteria.		<u>Electrical Structures</u> In this unit, children will design and make an electrical product using a shell frame, focussing on designing and creating an electrical game. Following on from Year 3's shell structure, children will design a shell structure to house an electrical circuit to be incorporated into a game, such as a beat the buzzer game. They will take apart products to see how wires and held together and kept out of the way/ safe. They will then create prototype shells as well as experiment with circuits in science, then design and build their own product. They will test and evaluate their product using design criteria.
5	<u>Mechanisms</u> In this unit, children will design and make a toy with a moving mechanism such as a cam, gears or pulley. They will explore a range of real-world examples that use those mechanism and play with some construction kits. They will identify positives of each as well as watch videos of real-world examples. They will then design and create their own animal themed mechanical toy for Blackpool Zoo shop.	<u>Food Technology</u> In this unit, children will learn how to make vegetable soup. They will build on their knowledge of where food comes from considering food miles and seasonality within food that they prepare and eat. They will continue to further their knowledge of where food is grown or reared and will visit Morrisons to consider food miles of various products. They will follow hygiene rules and use tools safely to prepare their ingredients and combine them to make a chunky vegetable		<u>Textiles</u> In this unit, children will design and make a piece of embroidery based on Victoria Potroviza's work on maps or iconic UK buildings. Sew on a button and sew pieces of material together. They will create a design for either an iconic building, or map and refine a range of stitches as well as sewing material together and adding a button. They will consider the best way to achieve their design through a range of stitches, sewing on a button and sewing on materials. They will focus		

		soup using a hob safely to fry and simmer. They will taste and evaluate their product following agreed criteria.		on aesthetics in particular. They will evaluate their own and others work against their original designs.		
6		Structures In this unit, children will design and make a collapsible birdwatching hide. Following on from their knowledge of shell structures, children will create a freestanding shell structure that is supported with a frame. They will consider aspects of a bird hide – such as it being enclosed, camouflaged etc and they will ensure that it is easily collapsible. They will need to explore permanent fixtures and temporary fixtures. They will design, make and evaluate their work accurately.	Food Technology In this unit, children will learn about different types of bread from around the world, understand what makes bread healthier, and consider the role of Fair Trade in ingredients. Children will develop skills in measuring, mixing, and baking, ultimately creating their own bread recipe. Children reflect on the healthiness, taste, and relevance to the Design Brief.			Electrical Systems In this unit, children will design and make an electrical system for a purpose such as an alarm for a vehicle or valuable item, motion activated light etc. They will consider the electrical components and circuit required as well as explore the most effective way to house it to either it obvious or inconspicuous. They will design and make their product considering its appearance and longevity and test it in the real world.