Christ The King Federation

Design and Technology 2022-2023 Curriculum Map with Endpoint Progression

Year Group	Autumn Term	Spring Term	Summer Term
EYFS **Theme**	**Autumn Acorn Crafts** Continuous provision: large-scale open-ended resources, a range of mark making materials, a range of materials such as paper, fabric, paint and fixing products such as tape.	**Spring Lamb Craft Activity** Continuous provision: large-scale open-ended resources, a range of mark making materials, a range of materials such as paper, fabric, paint and fixing products such as tape.	**Fruit Kebab Rockets!** Continues provision: a range of tools such as scissors, cutlery and boards; malleable materials for cutting and chopping.
End Points	**Early Learning Goal:** **Being Imaginative** **'Creating with Materials'** To safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; To share their creations, explaining the process they have used;	**Early Learning Goal:** **Physical Development** **'Fine Motor Skills'** Use a range of small tools, including scissors, paint brushes and cutlery;	**Early Learning Goal:** **Physical Development** **'Fine Motor Skills'** Use a range of small tools, including scissors, paint brushes and cutlery;

Year 1 **Topic**	**Mechanisms** **Sliders and levers** Linked to History: Toys. For example pop-up puppets or cards.	**Structures** **Freestanding Structures** Pirate Paddy's Packed Lunch Problems	**Food** **Preparing fruit and vegetables** Dips and Dippers
End points:	Children should be able to: • Explore an existing product. • Draw a simple design. • Make a picture, which has at least one moving mechanism. • Start to understand what design criteria is used for. • Evaluate what they did well on their product.	Children should be able to: • Recognise the positives about an existing product and any problems; • Draw a simple design and describe it • With support, build a strong structure for their lunch box; • Test their own product and suggest improvements.	Children should be able to: • Explain ideas about how to eat a healthy and varied diet. • Give a simple evaluation of a product by explaining their likes and dislikes. • Use kitchen equipment safely and prepare dishes.

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Year 2 **Topic**	**Textiles** **Templates and joining techniques** Our Fabric Faces	**Mechanisms** **Wheels and Axles** Moving Pictures Traditional Tales	**Food** **Preparing fruit and vegetables** Sensational Salads
End points:	Children should be able to: • Use a template to shape a piece of fabric. • Discuss their ideas as they develop and say what their design has to do to achieve the design criteria. • Create a fabric face that reflects their own face. • Stitch two pieces of fabric together using a running stitch and add features using appropriate materials and joining techniques. • Evaluate their product saying what they like and what they could improve.	Children should be able to: • Explore an existing product. • Draw a simple design. • Make a picture, which has at least one moving mechanism. • Start to understand what design criteria is used for. • Evaluate what they did well on their product.	Children should be able to: • Explain that the food they eat can be split into different groups and know they should eat a balance of foods, including fish, to have a healthy and varied diet. • Use the basic principles of a healthy diet to prepare dishes and start to understand why it is healthy. • Follow a simple recipe. • Work with some independence to correctly use measuring spoons, zesters and juicers when preparing dishes. Understand that fruit and vegetables are grown in different places and that fish is caught in seas, rivers and lakes.

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Year 3 **Topic**	**Structures** **Shell structures (including computer aided design)** Let's Go Fly A Kite	**Textiles** **2D shape to 3D product** Using a variety of fabric, fixing and sewing techniques Juggling Balls	**Food** **Healthy and varied diet** Edible Garden
End points:	Children should be able to: • Explain how Homan Walsh used a kite to help build the Niagara Falls Bridge. • Use research into the shape and parts of kites to develop simple design criteria. • Build simple frame structures and stiffen materials.	Children should be able to: • Investigate a range of existing products. • Develop a design based around a design criteria. • Use appropriate techniques to decorate fabric. With support create a hem using a running stitch and join fabrics using an overcast stitch.	Children should be able to: • Understand the Eatwell Guide and know which foods they should be eating more and less of. • Understand and know where and how a variety of ingredients are grown. • Be able to plant and care for a variety of ingredients so they yield produce. • Prepare ingredients safely and hygienically using appropriate kitchen utensils.

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Year 4 **Topic**	**Mechanical systems** **Levers and linkages** Mechanical Posters	**Electrical systems** **Simple circuits and switches (including programming and control)** Battery Operated Lights	**Food** **Healthy and varied diet** The Great Bread Bake Off
End points:	Children should be able to: • Explore how mechanical systems work. • Draw a design which uses annotations to add some detail. • Develop design criteria to inform the design of innovative products aimed at a particular audience. • Make a prototype and well finished poster, which aims to have two lever/linkage mechanisms. • Use design criteria to help guide the evaluation process.	Children should be able to: • Explain how technology has helped shaped the world we live in. • Explore and make a series and parallel circuit and follow instructions to make a switch. • Draw a simple annotated design. • Write their own simple design criteria. • Make a product which contains a working circuit to light a bulb. • Use a series of given questions to evaluate their product.	Children should be able to: • Explain why they have chosen certain foods and processes and link them to their design criteria. • Produce an order of work which includes an annotated diagram and chosen equipment appropriately. • Make and evaluate their bread product against objective design criteria. •

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Year 5 **Topic**	**Structures** **Frame structures** Marbulous Structures	**Programming** **More complex switches and circuits (including programming, monitoring and control)** Programming Adventures	**Food** **Celebrating culture and seasonality** Super Seasonal Cooking - links to Chinese New Year
End points:	Children should be able to: • Explore existing free standing structures and explain what gives them strength, reinforcement and stability. • Select tools and equipment to join card together. • Design and build a simple marble run. • Improve their work.	Children should be able to: • Understand how a floor robot moves • Program it accurately to move along a given route • Explore and select from a range of different materials to create obstacle squares. • Generate ideas for an adventure map. • Evaluate adventure maps against design criteria independently.	Children should be able to: • Understand what seasonality means. • Name some foods, which are grown, reared, caught and processed. • Design simple seasonal recipes. • Prepare a range of ingredients hygienically. • Prepare, assemble/cook ingredients.

Year Group	Autumn Term	Spring Term	Summer Term
Year 6 **Topic**	**Textiles** **Combining different fabric shapes (including computer aided design)** Felt Phone Cases	**Mechanical systems** **Pulleys or gears** Automata Animals	**Food** **Prepare and cook a savoury dish** Celebrating culture and seasonality Global Food
End points:	Children should be able to: • Aim the design criteria at a target market. • Use at least two different types of stitches. • Create and accurate paper template. • Measure and mark a sewing and cutting line.	Children should be able to: • Use research to develop design criteria. • Use their knowledge of the animal and movement made by the cam in the design of their automaton. • Measure, mark out and cut materials accurately and safely to the nearest cm using a wider range of tools and equipment. • Work mainly independently to make a mechanical device, selecting materials to make a framework, handle, cam mechanism and finishing the device. • Use peer feedback and design criteria to help guide the evaluation process.	Children should be able to: • Explain how eating different ingredients helps to give us a healthy and varied diet and understand the benefits of this. • Explain nutritional similarities between different types of food eaten around the world and say why this is important. • Accurately follow a recipe. • Use a wide variety of basic food skills such as peeling, juicing and dicing and some advanced skills such as baking, which enable them to prepare some more complex savoury dishes.