Holy Rood – Design Technology Curriculum Map

'The family of Holy Rood School will try to live, learn, grow and celebrate together, as friends, through the love of Christ.'

Subject: Design & Technology

	Autumn	Spring	Summer
Year 1	Houses and Homes Make A Doll's House Structures In this unit, the children will create homes and houses. After exploration of different styles of homes and houses, the children will design and create their own houses. They will be supported to learn how to cut, join and combine materials into sturdy models. They will develop vocabulary to discuss construction: attach, join, glue, link, secure. Etc. The class will have made their own small cardboard town by the end of the unit.	Moving Pictures Sliders and Levers Mechanisms In this unit, children will explore and evaluate a collection of books and everyday products that have moving parts, including those with levers and sliders. They will develop vocabulary to discuss mechanism such as e.g. lever, pivot, slider, left, right, push, pull, up, down, forwards, backwards, in, out. The mechanism could be for a card, storyboard for a known text or fairytale.	Fruit Salad and Fruit Skewers Cooking and Nutrition In this unit, children will examine a range of different fruit. The children will learn how to use simple utensils and provide opportunities for the children to practise food-processing skills such as washing, grating, peeling, slicing, squeezing. The children will use talk and drawings when planning for their fruit salad and skewers.
Year 2	Pop Up Christmas Cards Sliders and Levers Mechanisms In this unit, children will look at range of greetings cards with moving part, including those with levers and sliders. They will come up with their own design for their Christmas card, which features a moving mechanism. The mechanisms will now be: levers, linkages and fixed pivots.	Hand Puppets Textiles In this unit, children will investigate to determine which is best for the purpose of the product they are creating. They will use a simple template from a teacher initially, but may go on to create their own template. With support, they will learn examples of joining techniques in guided groups (running stitch including threading own needle, stapling, lacing and gluing) and will then create their own hand puppet character.	Teddys Bear's Picnic Cooking and Nutrition In this unit, children will consider suitable food for picnics. They will consider what makes food suitable to be eaten outside, what can be prepared and then cooled before eating. They will carry out surveys with their classmates into preferred and favourite foods and then host a Teddy Bear's picnic on the school field.
Year 3	Make A Maze Mechanisms In the unit, the children will design and plan their own maze	Packaging Shell Structures Structures In this unit, children will investigate a collection of different	Sandwich Snacks Cooking and Nutrition The starting point of this unit is to analyse the contents of the class' lunchbox. The children will explore

	game. They will work with doweling materials and balsa wood to create 3d mazes. They will consider and evaluate similar products on the market, select a theme they believe would be popular with children their age and create a maze set within a frame.	shell structures including packaging. Children take a small package apart identifying and discussing parts of a net including the tabs. The children will practise making nets out of card, joining flat faces with masking tape to create 3-D shapes and will experiment with assembling in nets in numerous ways. The children will use annotated sketches and prototypes to develop, model and communicate their ideas for the product.	different ways of making sandwiches e.g. toasted sandwiches, double-decker sandwiches, open sandwiches, club sandwiches, filled pitta, filled fajitas, 'doorstep'/chunky filled sandwiches. They will discuss the purpose of the sandwiches they will be designing, making and evaluating (and whom the products will be for). They will also use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas.
Year 4	Tree Decorations Textiles As part of Christmas craft, the class will create a range of tree decorations of their own design. They shall learn a range of stitches including backwards running stitch; over-sew stitch, running stitch and blanket stitch. The decorations will first be used to decorate the school Christmas trees and will then be sent home to adorn their family Christmas trees.	Vehicle Alarming Electrical Systems In this unit, the children will recap from Autumn Term Science topic, how to make manually controlled simple series circuits with batteries and different types of switches, bulbs and buzzers. The children will make a variety of switches by using simple classroom materials e.g. card, corrugated plastic, aluminium foil, paper fasteners and paper clips. Encourage children to make switches that operate in different ways. Using annotated sketches, cross-sectional and exploded diagrams, as appropriate, ask the children to develop, model and communicate their ideas for making a siren for a toy vehicle.	Make A Magic Wand Structures As part of their unit of work on Harry Potter, the class will visit the Warner Brothers Harry Potter Studio Tour. There they will examine the range of wands available for purchase in the gift shop. They children will design and make a wand for a book character. They will use a range of modelling techniques, CAD design and a medium of their choosing (paper mache, clay etc.)
Year 5	Making A Stocking Textiles In the run up to Christmas, the class will create a stocking. Using felt as the base material they will develop skills of threading needles and joining textiles (and other festive decorative touches) using a range of stitches.	Fairtrade Biscuits Cooking and Nutrition In this unit, the children will learn how to adapt a recipe. They will make an investigation of existing products, including biscuits that are fair trade that will inform their design ideas. This unit encourages pupils to utilise and develop a range of skills including real life practical maths skills, such as measuring accurately, converting measures (kg-g and g-kg) and applying ratio and proportion to recipes.	Fairgrounds Mechanisms In this unit, children will investigate combinations of two different sized pulleys to learn about direction and speed of rotation. The children will develop measuring, marking, cutting, shaping and joining skills using junior hacksaws, G-clamps, bench hooks, square section wood, card triangles and hand drills to construct wooden frames, as appropriate.

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Year 6	Bird Hides Structures The unit requires children to plan, design and build a model 'Bird Hide'. A 'Bird Hide' is a shelter, often camouflaged, that is used to observe wildlife, especially birds, at close quarters. Children must join wood, doweling, and stretch suitable fabric over a wooden frame.	Designer Bags Textiles The unit requires children to investigate, analyse and evaluate a range of existing products which have been produced by combining fabric shapes. Children investigate and analyse how existing products have been constructed. Children disassemble a product and evaluate what the fabric shapes look like, how the parts have been joined, how the product has been strengthen and stiffened, what fastenings have been used and why. The children will also experience the skill of tie dying to decorate their bags. The children will also select a range of fastening devices suitable for their products.	Caribbean Cocktails Cooking and Nutrition Smoothies are popular as a tasty contribution towards a healthy diet. This unit provides children with an opportunity to combine different fruits and design your own healthy recipes, while learning about the lifestyle of the Caribbean people. They will investigate products and evaluate the nutritional value on labels, especially on fruit juices and smoothies. They will plan recipes, develop criteria, taking customers' needs into consideration.