

Christ the Sower Ecumenical Primary School D&T Curriculum Overview



		Autumn 2	Spring 2	Summer 2	
	EYFS	All about Me! Celebrations Exploring colours Creating images using shapes Natural resources collages Christmas arts and crafts Scissor focus activities Biscuit decorating Cake baking Trying new fruits from different countries	Buildings and Transport Drawing/sketching buildings in our local community Playdough and tools to sculpture Colour mixing Bread making Developing independence Organising activities Developing speaking in a familiar group Building walls	 Let's grow! Creating models Collage using natural materials Exploring different mediums including water colours, pastels, and chalks Select resources needed independently Scissor focus activities 	
Year One	Unit name	Focus Question: Can we build a castle for a king or queen, that is stable enough to withstand an attack? DT Thread: 3D structures: (collaborative working)	Focus Question: Can we prepare a healthy meal using fruit and vegetables? DT Thread: Cooking unit: Eating more fruit and Vegetables	Focus Question: Can I create a moving alien picture that tells a story? DT thread: mechanisms and mechanical systems	
	Unit Description	Design and create their own 3D castle that fits the design brief and is able to withstand an attack (Paper ball missiles)	Learn how to identify fruits and vegetables. Then apply this knowledge to design and make a healthy platter that will appeal to children.	Explore levers and sliders to make a moving story picture.	
	Skills	 Design: Designing for others, using criteria, and applying knowledge of structures through planning. Make: Identify flaws in design and think about ways to strengthen them. Cutting and assembling accurately. Evaluate: explore natural and manmade structures, test, evaluate and analyse existing structures. Technical Knowledge: understand strength, stability and stiffness knowing that different shapes can strengthen or weaken structures and that materials can be manipulated to improve strength and stiffness. 	 Design: Planning for the set brief, following simple criteria: a healthy fruit and vegetable platter/salad Make: Prepare food safely and hygienically, chopping and slicing safely using a bridge or claw grip Evaluate: conduct product research, trialing and feeling back on food taste, texture, and aroma. Technical Knowledge: identifying each of the food groups, understanding what is a balanced diet, and developing an awareness of hidden sugars. 	Design: Planning and sketching the mechanical elements in a moving picture Make: assembling mechanisms to create various movements (up, down, along, around) Evaluate: reflecting on the finished storybook, by expressing likes, dislikes and improvements. Technical Knowledge: exploring how levers and sliders work in paper-card format to create different movements,	
	Curriculum links:	CREATING: Creating models linked to transport and building topics (EYFS) SCIENCE: Everyday materials (Y1) DT: 3D structures: Frames (Y2) SCIENCE: Materials (Y2) DT: Musical instruments (Y4)	CREATING: making and decorating gingerbread and biscuits (EYFS) PSHE: Healthy food (Y1) DT: Vegetable soup (Y2) SCIENCE: Healthy Eating (Y2 and Y3) DT: Baking bread(Y3)	CREATING: Creating pictures using collage and shapes (EYFS) SCIENCE: Everyday materials (Y1) SCIENCE: Materials (Y2) DT: Creating a pneumatic hand (Y3) SCIENCE: Animals, including humans - skeletons (Y3)	

Year Two	Unit name	Focus Question: Can we make a bag that is strong enough to carry Samuel Pepys' Diary? DT Thread: Textiles; Sewing bag or purse	Focus Question: Can we make a healthy soup that will appeal to children? DT Thread: Cooking Unit; vegetable soup	Focus Question: Can we make a frame that can display a 3D butterly? DT Thread: 3D structures: Frames
	Unit Description	Design and make a wallet or purse that can carry a book. Learn to use running stitch to join two pieces of fabric together.	Explore what makes a balanced diet and tatse test combinations of different vegetables, before designing and making a healthy soup.	Explore existing frames, evaluating their structural properties. Learn the skills of cutting and joining wood to make stable right angle joints. Apply this knowledge to their own design, make and test frame.
	Skills	Design: Designing and sketching design ideas using a template Make: threading needle, sewing a running stich, preparing fabrics for sewing, tying a knot. Evaluate: discussing the making process and finished product, reviewing each other's final outcome. Technical Knowledge: identifying the parts of a needle(point and eye)understanding the alternative ways of joining fabrics and embellishments'.	 Design: Planning for the set brief, following simple criteria: a healthy vegetable soup Make: Prepare food safely and hygienically, chopping and slicing safely using a bridge or claw grip Evaluate: conduct product research, trialing and feeling back on food taste, texture, and aroma. Technical Knowledge: identifying each of the food groups, understanding what a balanced diet is, and developing an awareness of hidden sugars. 	 Design: Designing using criteria, and applying knowledge of structures through planning. Make: Identify flaws in design and think about ways to strengthen them. Cutting and assembling accurately. Evaluate: explore natural and manmade structures, test, evaluate and analyse existing framess. Technical Knowledge: understand strength, stability and stiffness knowing that different shapes can strengthen or weaken structures and that materials can be manipulated to improve strength and stiffness.
	Curriculum links:	CREATING: scissor focus activities (EYFS) SCIENCE: Everyday materials (Y1) SCIENCE: Materials (Y2) DT: Puppets (Y3)	CREATING: making and decorating gingerbread and biscuits (EYFS) PSHE: Healthy food (Y1) DT: Fruit And vegetables (Y1) SCIENCE: Healthy Eating (Y2 and Y3) DT: Baking bread(Y3) DT: Baking biscuits (Y4)	CREATING: Creating models linked to transport and building topics (EYFS) SCIENCE: Everyday materials (Y1) SCIENCE: Materials (Y2) DT: Creating a pneumatic hand (Y3)
Year Three	Unit name	Focus Question: Can we build a new arm for the iron man that can pick up an object. DT thread: mechanisms and mechanical systems- Pneumatics	Focus Question: Can we make a puppet that can tell a Greek theatre story? DT Thread: Textiles; Sewing puppets.	Focus Question: Can we make an Egyptian bread that is fit for a pharaoh? DT Thread: Cooking Unit; African Bread
	Unit Description	Examine pneumatic systems using a range of techniques and materials then apply their understanding to create a moving hand or arm that can pick up a light object.	Learn the different ways they can join fabrics together through the creation of a puppet.	Following and adapting a recipe, then work in groups to create a final design that falls within a set budget and a design brief.

	Skills	 Design: generating and communicating ideas using thumbnail sketches, exploded diagrams and modelling, drawing plans to communicate the mechanism. Make: selecting appropriate materials and equipment for functional and aesthetical purposes Evaluate: assessing how well their product works and if it matches their original design ideas and criteria Technical Knowledge: understanding how pneumatic systems work, identifying the key inputs and outputs if the mechanism, expressing the need for visual communication in the design process. 	 Design: generating and communicating ideas using thumbnail sketches, exploded diagrams and modelling, drawing plans to communicate the mechanism. Make: selecting appropriate materials and equipment for functional and aesthetical purposes Evaluate: assessing how well their product works and if it matches their original design ideas and criteria Technical Knowledge: recapping running stitch and introducing over stitching. Expressing the need for a neat and well polished final design. 	 Design: reviewing existing products to inform design ideas, working with a set design brief. Make: follwinhg but adapting an existing recipe, preparing food hygienically, creaming and combining ingredients to form a basic dough. Evaluate: reflecting and identifying flavours from a prototype, reviewing what aspects to change to improve the current recipe. Technical Knowledge: understanding the cost implications behind professional food preparation, altering a dough to be savoury or sweet, knowing to mix dry ingredients before combining with wet.
	Curriculum links:	CREATING: Creating models linked to transport and building topics (EYFS)' DT: Moving alien picture (Y1) SCIENCE: Everyday materials (Y1) SCIENCE: Materials (Y2) DT: Frames (Y2)	CREATING: Creating pictures using collage and shapes (EYFS) SCIENCE: Everyday materials (Y1) SCIENCE: Materials (Y2) DT: Making Puppets (Y2) SCIENCE: Materials (Y3) DT: Creating a pneumatic hand (Y3)	CREATING: making and decorating gingerbread and biscuits (EYFS) PSHE: Healthy food (Y1) DT: Fruit And vegetables (Y1) SCIENCE: Healthy Eating (Y2 and Y3) DT: Making Soup (Y2) PSHE: Health choices and habits (Y3) DT: Baking biscuits (Y4)
lear our	Unit name	Focus Question: Can we design and make a pizza that is suitable for tea with Mr Tumnus? DT Thread: cooking unit: Pizza	Focus Question: Can we create an illuminated sign, with a homemade switch, that contains a hidden coded message? DT Thread: Electrical Systems: Creating an illuminated sign.	Focus Question: Can we design and build an African instrument suitable for our class musical performance. DT Thread: 3D structures: Designing and making a musical instrument.
	Unit Description	To follow and adapt recipes to design a pizza that is suitable for another person and a set event.	To create an illuminated sign The design brief states that the sign should light up, have a homemade switch and should also contain a secret cipher or message.	To explore and investigate African instruments. To build prototypes of different styles of percussion instruments. To design and build their own, that meets the design brief and purpose.
	Skills	 Design: generating and communicating ideas using thumbnail sketches, exploded diagrams and modelling, drawing plans to communicate the mechanism. Make: selecting appropriate materials and equipment for functional and aesthetical purposes Evaluate: assessing how well their product works and if it matches their original design ideas and criteria Technical Knowledge:. identifying each of the food groups, understanding what a balanced diet is, and developing an awareness of hidden sugars. 	 Design: generating and communicating ideas using thumbnail sketches, exploded diagrams and modelling, drawing plans to communicate the mechanism. Make: selecting appropriate materials and equipment for functional and aesthetical purposes Evaluate: assessing how well their product works and if it matches their original design ideas and criteria Technical Knowledge: understanding how electrical systems work, identifying the need to test circuits and ensure accuracy., Express the need for visual communication in the design process. 	Design: generating and communicating ideas using thumbnail sketches, exploded diagrams and modelling, drawing plans to communicate the mechanism. Make: selecting appropriate materials and equipment for functional and aesthetical purposes Evaluate: assessing how well their product works and if it matches their original design ideas and criteria Technical Knowledge: understanding how pneumatic systems work, identifying the key inputs and outputs if the mechanism, expressing the need for visual communication in the design process.

	Curriculum links:	CREATING: making and decorating gingerbread and biscuits (EYFS) PSHE: Healthy food (Y1) DT: Fruit And vegetables (Y1) SCIENCE: Healthy Eating (Y2 and Y3) DT: Making Soup (Y2) PSHE: Health choices and habits (Y3) DT: Baking biscuits (Y4)	CREATING: Creating pictures using collage and shapes (EYFS) SCIENCE: Everyday materials (Y1) SCIENCE: Materials (Y2) DT: Making Puppets (Y2) SCIENCE: Materials (Y3) SCIENCE: Electricity (Y4)	CREATING: Creating models linked to transport and building topics (EYFS)' DT: Moving alien picture (Y1) SCIENCE: Everyday materials (Y1) SCIENCE: Materials (Y2) DT: Creating a pneumatic hand (Y3)
Year Five	Unit name	Focus Question: Can we make a stuffed toy with a sea theme? DT Thread: Textiles: Stuffed Toy	Focus Question: Can we create a moon rover that can travel 50cm? DI Thread: Mechanical Systems: Designing and making a moving vehicle.	Focus Question: Can we create a dish that has been influenced by immigration? DT Thread: Cooking unit – World cuisine – The influence of immigration
	Unit Description	Learn blanket stitch and then design and make a 3D stuffed toy.	Using kinetic energy to power a slingshot vehicle, designing and making their own and then testing their effectiveness in time trials.	Work in groups, they will research and prepare a meal that is linked to immigration and the diversity of our school community. Meals will be taste tested and scored as well as researching their main ingredient from farm to fork.
	Skills	 Design: designing for a purpose, considering which techniques and materials to use, creating a paper pattern piece for the main body and any additional components. Make: selecting and using appropriate stitch types to join and attach materials depending on their properties. Evaluate: comparing 3d object to 2d design, evaluating existing stuffed toys, identifying poor sewing techniques and where possible rectifying it (EG: pulling it tighter , sew closer stitches etc.) Technical Knowledge: Identifying methods of joining fabric effectively, running stich, cross stitch and blanket stitch, knowing how to create a hidden seam and seal stuffing. 	 Design: developing designs following a list of design criteria, modelling and testing the launch chassis. Make: selecting the materials and tools to measure, mark, cut and assemble accurately, using nets and tabs to design the rover chassis. Evaluate: testing products in time trials, comparing to others designs, discussing and recording ways ti improve the speed of the car, reviewing and learning about aerodynamic shapes in cars. Technical Knowledge: utilising car-part vocabulary EG: Chassis, developing net and template creation and recognising key mechanisms as a spart of key functionality. 	 Design: researching and reading recipe books, speaking to family members and classmates to inspire and develop recipes, selecting ingredients, planning methods and determining equipment needed Make: working hygienically and safely with food. Working to a time scale, using a variety of cooking methods such as steaming, boiling and baking. Evaluate: tasting, scoring, and evaluating each other's 3 course meals. Technical Knowledge: understanding the risks of meat and fish when not cooked or stored properly, understanding the safe storage of meat and fish, designing and balancing a 3 course meal.
	Curriculum links:	CREATING: Creating pictures using collage and shapes (EYFS) SCIENCE: Everyday materials (Y1) SCIENCE: Materials (Y2) DT: Making Puppets (Y2) SCIENCE: Materials (Y3)	CREATING: Creating models linked to transport and building topics (EYFS)' DT: Moving alien picture (Y1) SCIENCE: Everyday materials (Y1) SCIENCE: Materials (Y2) DT: Frames (Y2) DT: Creating a pneumatic hand (Y3) DT: Musical instrument (Y4)	CREATING: making and decorating gingerbread and biscuits (EYFS) PSHE: Healthy food (Y1) DT: Fruit And vegetables (Y1) SCIENCE: Healthy Eating (Y2 and Y3) DT: Making Soup (Y2) PSHE: Health choices and habits (Y3) DT: Baking biscuits (Y4)

Year 6	1`	Focus Question: Can we create something for the home using recycled fabrics? DT Thread: Structures: Bird House	Focus Question: Can we create a filling meal that is fit for the workhouse? DT Thread: Cooking Unit: design, plan and cook a balanced 3 course meal	Focus Question: Can we create a computer controlled electronic door buzzer for the classroom? DT Thread: electrical systems: programming and electronics
	Unit Description	Children to explore bird houses and evaluate them against set design criteria. Linked to Science – what do birds need in a home that they will nest in?	Using existing recipes, to adapt, develop and write our own that will create a balanced 3 course meal	Design, develop and create computer controlled electronic systems for the home. Using Rapsberry Pi and Scratch 2, pupils can develop products such as door buzzer entry systems and smart home automatic lights.
	Skills	 Design: generating and communicating ideas using thumbnail sketches, exploded diagrams and modelling, drawing plans to communicate the mechanism. Make: selecting appropriate materials and equipment for functional and aesthetical purposes Evaluate: assessing how well their product works and if it matches their original design ideas and criteria Technical Knowledge: understanding how to strengthen structures, expressing the need for visual communication in the design process. 	 Design: generating and communicating ideas using thumbnail sketches, exploded diagrams and modelling, drawing plans to communicate the mechanism. Make: selecting appropriate materials and equipment for functional and aesthetical purposes Evaluate: assessing how well their product works and if it matches their original design ideas and criteria Technical Knowledge: identifying each of the food groups, understanding what a balanced diet is, and developing an awareness of hidden sugars. 	Design: generating and communicating ideas using thumbnail sketches, exploded diagrams and modelling, drawing plans to communicate the mechanism. Make: selecting appropriate materials and equipment for functional and aesthetical purposes ,using scratch to directly programme the Raspberry Pi and electrical systems that have been built./ Evaluate: assessing how well their product works and if it matches their original design ideas and criteria Technical Knowledge: understanding how to programme instructions in Scratch that will control the PI system. Build, test and improve the electrical systems to ensure that it meets the design brief and is fit for purpose.
	Curriculum links:	CREATING: Creating pictures using collage and shapes (EYFS) SCIENCE: Everyday materials (Y1) DT: Frames (Y2) SCIENCE: Materials (Y2) SCIENCE: Materials (Y3) DT: Creating a pneumatic hand (Y3)	CREATING: making and decorating gingerbread and biscuits (EYFS) PSHE: Healthy food (Y1) DT: Fruit And vegetables (Y1) SCIENCE: Healthy Eating (Y2 and Y3) DT: Making Soup (Y2) PSHE: Health choices and habits (Y3) DT: Baking biscuits (Y4) DT: Caribbean cooking (Y5)	CREATING: Creating models linked to transport and building topics (EYFS)' DT: Moving alien picture (Y1) SCIENCE: Everyday materials (Y1) SCIENCE: Materials (Y2) DT: Frames (Y2) DT: Creating a pneumatic hand (Y3) SCIENCE: Electricity (Y4) DT: Musical instrument (Y4) DT: Moon rover (Y5)