Holy Trinity Catholic Primary School

Design Technology Curriculum Overview

Holy Trinity offers full coverage of the EYFS, KS1 and KS2 Design Technology curriculum.

	Autumn		Spring		Summer	
N	**Why I Am Unique Colour Monster**	**Why I Am Unique Let's Celebrate!**	**Winter Wonderland Changes**	**Finders Keepers Growth**	**Reach for the sky**	**Once Upon A Farm**
	Food – making apple cake with apples from our school orchard children to encourage to try a variety of different foods at our Diwali celebrations. **painting and printing** techniques using different media and one-handed tools To use their hands and feet to create their own printing masterpiece **Joining skills -** To understand how to join two pieces of paper using a glue stick **Structures** – children to use blocks and bricks during independent learning. **Scissor skills** – introduction to scissors to make snips into a variety of different media.		**Food** – making winter warming soup. Children will use tools safely to chop vegetables for the soup. **painting and printing -** use different brushes for different purposes. To make their own brushes from different materials. To paint onto a range of natural materials and print onto paper. **Joining skills** to be able to use masking tape and sticky tape. To join their own creations using elastic bands and paper clips. **Structures -** to make own creation small and large scale using a variety of joining techniques and resources. To use large and small blocks during independent learning. **Scissor skills –** continuation to make snips into a variety of different media.		**Food** children will plant seeds to make their own 'leafy salad' **Painting and printing** to experiment mixing colours To begin to use the appropriate colours in paintings. To talk in more detail about their work. **Joining skills–** Children to be able to use tags to join their creations To join their creations using the techniques they have learnt. **Structures** to make own creation small and large scale using a variety of joining techniques and resources. To use large and small blocks during independent learning. **Scissor skills -** Introduce easy grip / spring assisted / training scissors to develop wrist and hand strength.	
R	**HT Hunters Children will express**	**Where are you from?**	**Out of this World!**	**New Life**	**Where are you?**	**He's Got The Whole World in His Hands.**
	Food- children to make fruit skewers linked to Handa's surprise **Painting and Printing** Children to explore a variety of painting techniques using different media and one-handed tools. To paint on different textures and talk about what happens. To creates patterns and pictures by printing from objects using more than one colour. **Joining skills -** children to use a variety of joining methods using glue sticks, PVA glue masking and sticky tape. **Scissor skills -** Introduce easy grip / spring assisted / training scissors to develop wrist and hand strength. Focus on opening and closing the blades. Making small snips into paper and moving the blades forward. Teach how to hold paper with non-dominant hand. **Structures** – children to use large and small blocks during independent learning. To make own creation small and large scale using a variety of joining techniques and resources.		**Food-** to design a packed lunch to take into space **Painting and Printing -** children to explore mixing colours and begin to understand light and shade. **Joining skills** to be able to use masking tape and sticky tape. To join their own creations using elastic bands and paper clips. **Scissor skills -** Using easy grip / spring assisted / training scissors / regular scissors. Cuts a straight line and a variety of shapes Cuts complex shapes, such as figures. **Structures** Children will make their own 'space rocket' using junk modelling and deconstructed role play using a range of joining techniques. To use large and small blocks during independent learning. Children to make their own creations using a variety of joining techniques and resources.		**Food-** Children to have experience of growing their own food. **Painting and Printing -** children to explore mixing colours and begin to understand light and shade. **Joining skills -** Children to join their creations using the techniques they have learnt over the year **Scissor skill** **Structures -** Stickman – children will make their own stickman using a variety of different natural materials and joining techniques. To make own creation small and large scale using a variety of joining techniques and resources. **Scissor skills -** Using easy grip / spring assisted / training scissors / regular scissors. Cuts a straight line and a variety of shapes Cuts complex shapes, such as figures. **Structures** To use large and small blocks during independent learning. to make own creation small and large scale using a variety of joining techniques and resources.	

	Autumn	Spring	Summer
Y1	**Mechanisms: Making a Moving Storybook** Children experiment with sliders before planning and making three pages of a moving storybook, based on a familiar story. They will draw the page backgrounds, make the moving parts and assemble it.	**Food: Fruit and vegetables** Children handle and explore fruits and vegetables and learn how to identify which category they fall into, before undertaking taste testing to establish their chosen ingredients for the smoothie they will make and design packaging for.	**Textiles: Puppets** Children explore different ways of joining fabrics before creating their own hand puppets based upon characters from a well known fairy-tale. Throughout they work to develop their technical skills of cutting, gluing, stapling and pinning.
Y2	**Structures: Baby Bear Chair** Using the tale of Goldilocks and the Three Bears as inspiration, children help poor Baby Bear by making him a brand new chair. When designing the chair, they consider his needs and what he likes and explore ways of building it so that it is a strong and stable structure and doesn't break again!	**Mechanisms: Making a Moving Monster** After learning the terms; pivot, lever and linkage, children set to designing a monster that will move using a linkage mechanism. After practising making linkages of different types and varying the materials they use, children can also bring their monsters to life with the gift of movement.	**Food: A Balanced Diet** Through their exploration of what makes a balanced diet, children taste test food combinations of different food groups. They will also aim to make a wrap that includes a healthy mix of protein, vegetables and dairy, and learn about the term 'hidden sugars'.
Y3	**Textiles: Cushions** Having already learnt the basics of sewing and decorating fabric in earlier years, this topic offers extra challenge by introducing two new skills to add to their repertoire: cross stitch and appliqué. After learning these techniques, they apply their knowledge to the design, decoration and assembly of their very own cushions	**Food: Eating Seasonally** Children discover when and where fruits and vegetables are grown and also learn about seasonality in the UK. They will also learn about the relationship between the colour of fruits and vegetables and their health benefits by making three dishes using seasonal ingredients.	**Mechanical Systems: Pneumatic Toys** Children design and create a toy with a pneumatic system, learning how trapped air can be used to create a product with moving parts while also building on their design knowledge. They will then be introduced to thumbnail sketches and exploded diagrams
Y4	**Electrical Systems: Torches** In this topic, children apply their scientific understanding of electrical circuits to create a torch made from easily available materials and objects. They will also design and evaluate their product against set design criteria.	**Textiles: Fastenings** Building upon their sewing skills from previous years, this topic sees the children designing and creating a book sleeve; exploring a variety of fastenings and selecting the most appropriate one for their design. Children have greater creative freedom at every stage of the project	**Structures: Pavilions/Bug Hotel** The children explore pavilion structures, learning about what they are used for and investigating how to create strong and stable structures before also designing and creating their own pavilions, complete with cladding
Y5	**Electrical systems: Electronic Greeting Cards** This unit builds on pupils' knowledge of how to incorporate electrical circuits into products from Y4. Children explore how circuits can be adapted to suit different purposes, explore series circuits and recreate one using conductive adhesive tape. They then apply this knowledge to design and create an electronic greeting card.	**Structures: Bridges** This topic develops children's understanding of secure structures and introduces them to measuring, sawing and joining wood accurately. After learning about different types of bridges and also exploring how the strength of structures can be affected by the shapes used. Children create their own wooden bridge and test its durability.	**Food: What Could be healthier?** Focusing on nutrition, children research and modify a traditional Bolognese sauce recipe to make it healthier. They will cook their new and improved versions, making appropriate packaging and also learn about the ethical considerations of farming cattle.
Y6	**Textiles: Waistcoats/Slippers** Using the skills they've developed over the past few years, children select fabrics, use templates, pin, decorate and stitch to create a waistcoat for a person or purpose of their choosing	**Mechanical Systems: Automata Toys** Using woodworking materials and skills, children construct a window display using an automata mechanism; measuring and cutting their materials, assembling the frame, choosing cams, designing the characters that sit on the followers and also finishing with a foreground and background.	**Electrical Systems: Steady Hand Games** Using their understanding of electrical systems and design, children are challenged with designing and creating a steady hand game. Children will use nets to create their bases and their knowledge of electrical circuits to build a circuit with a buzzer which closes when the handle makes contact with the wire frame