



Design Technology

Whole-School Overview

	Autumn		Spring		Summer		Connecting Across the Curriculum					
EYFS Nursery/ Reception	Nursery - What have I made? Reception - What will I make and how will I make it? Children will begin developing early design and technology skills.. The children will be encouraged to access learning in both indoor and outdoor learning environments. They will be provided with the opportunity and resources to: • Build with a purpose-use construction to create something with a purpose. • Work together to solve problems and find solutions • Discuss ideas with others and develop their language for communication and thinking. • Share, turn take and collaborate • Talk about what they have made, explain their choices and say what they like about their work and that of others. • Make birthday cards, puppets, models, signs – autumn 2 snap, crackle and pop • Measure, count and develop an awareness of size and space. – spring 1 once upon a time • Use a range of tools and equipment to develop control, cutting, joining and folding. • Develop gross motor control through den building, creating obstacle courses • Expressing and representing ideas						• Writing and drawing • Ascribing meaning • Communication and Language • Physical Development – Fine Motor • Art and Design • Communication and Language • Understanding World					
	Reception	Super Duper Me What can I use to build my house? How can I make my house better?	Snap, Crackle and Pop How will I make a celebration card? What do I need?	Once Upon a Time How long is Jack’s beanstalk? What can I measure with?	Earth and Beyond How can we build a rocket to take us to space?	Into the Wild What does a bird house have to have?						
Year 1	How can I make a moving toy? (wheels and axles) To identify wheels and axles in the real world. To explain that when a wheel and axles are joined they form a simple mechanism that provides movement. To know and use technical vocabulary relating to wheels and axles. To design and create their own moving vehicle simple wheels and axles and explore		How can I make a picture move? (Levers and sliders,) To identify simple sliders and levers in the world. To explain that sliders and levers are mechanisms that provide movement. To know and use technical vocabulary relating to sliders and levers.		How is bread made? To name and sort fruit and vegetables. To understand where fruit and vegetables come from and that food comes from plants and animals. Begin to learn how food comes from a source to our plate - wheat to flour to bread. Learn basic food preparation skills including cleaning/washing before eating, peeling, chopping and preparing skills		• History – toys from the past/GFoL • Numeracy – Measure • Science/PSHE- Health and Hygiene					



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	the different ways these can be made and move. To evaluate how effective their moving product is and explain why the strengths/weaknesses of their wheel/axle mechanism.	To design and create own simple mechanism with levers or slides and talk about how their mechanism works how they work. To evaluate how effective a slider or lever is and explain why it is good and or how it can be better.	Following a recipe, measuring/weighing and mixing ingredients, process for bread making, rising, kneading, proving, hygiene.	
Year 2	How can materials be joined successfully? Investigating and evaluating joining techniques To identify different ways textiles are used. To identify different fabric fasteners and say how they work. To explain what a template is and demonstrate how to use one. To know and use technical vocabulary relating to textiles joining and fastening. To design and create a simple puppet. To evaluate how effective their product is and explain why it is good and how it could be improved further.	What local sourced food could I use to make a healthy snack? Understand that food has to be reared (comes from elsewhere) grown or caught and further develop their understanding of how their food comes from a source to our plate. Begin to explore the food groups and learn the need for a healthy, balanced diet, Start to identify how the food groups meet our needs e.g. carbohydrates=energy. Explore the eat well plate and how the different parts of a meal fit into the section of the plate. Learn how to prepare food by grating, slicing, chopping and cutting. Make a healthy salad or fruit kebab using seasonal or locally sourced ingredients.	How can I make a new building for Kenya? To identify free standing structures and explain how they know they are freestanding. To identify similarities and differences in f/s structures. To experiment with different assembly techniques for strength and stability. To design and create a free standing structure for a building in Kenya. To evaluate how effective their f/s structure was and explain why it is good and or how it can be better	• Science : Food and Healthy Eating • PSHE • STEM
Year 3	How can I safely prepare my family healthy meal? Begin to learn which food is grown (tomatoes, wheat, potatoes), reared (pigs, chicken, cattle) and caught (fish) in the UK, Europe and Wider World. Learn that different parts of the plant can be eaten-root/,tuber, stem, fruit, flower.	How can I make an exciting book for a younger child with moving parts? Investigate, understand and use lever and linkages, and fixed and loose pivots. Generate realistic ideas and use annotated sketches and prototypes to develop, model and communicate ideas for a moving book. Select and use tools with some accuracy to cut, shape and join paper and card.	How can I keep a special item safe? Generate design plans to make a receptacle to keep an object safe Produce annotated sketches, prototypes, final product sketches and pattern pieces. Select fabrics and fastenings according to their functional characteristics. Investigate a range of 3-D textile products and their fastenings.	• PSHE – what is special, taking responsibility • Science/PSHE – Health and hygiene • Literacy/Geography



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	Begin to understand how food is imported and exported and the benefits and limitations of this. Develop food preparation, safety and hygiene skills including hair tied up, earring aprons, washing hands, food preparation, use of different chopping boards. Design and prepare a healthy sandwich.	Investigate and analyse their own and others' products with lever and linkage mechanisms. Design and prepare a moving book	Test their product against the original criteria and with the intended user.	
Year 4	How can we light up Christmas? To identify what uses an electrical system. To explain how an electrical system works and how it provides power to make the components work. To create handmade switches and explain how and why they work. To create electrical circuits to provide power to a product prototype. To design a Christmas decoration that lights up and is controlled by a switch. To evaluate the effectiveness of the product by referring to the specification.	Is there enough to go around? Further develop understanding of food grown in the UK and Europe. Identify foods grown in the UK and why these may thrive in our climate. Prepare hygienically savoury food. Carry out safe and hygiene food preparation and begin to understand what could happen that food poisoning can occur if not followed. Children think about rationing and self-sufficiency which was an issue during WW2. Discuss issues of injustice and inequality around the world still today. Children are then to be given a problem to solve whereby they are given a small number of food items from which to create a meal. To prepare and make a healthy soup.	How can we bridge the gap? Identify bridge structures in the world and explain why they are used. Investigate and explain how bridge structures are created and what gives them strength. Create bridge structures from different materials and test their strength. Design and make a bridge structure to span a river. To carefully measure, cut to ensure the dimensions are correct and use appropriate joining techniques	• Science – electricity • History – WW2 – rationing • Geography – rivers • PSHE – Equality/Injustice • Eco – Sustainability