

Design Technology Curriculum Overview

Cycle A	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1/2			<u>Mecha</u> Wheels a		Food – The Eatwell Plate -Where food comes from	<u>Structures</u>
Key Learning			a design criteria, adding drawir	fixings and discuss Ind functional products based on large to explain. Iterials/tools they will need.	*Understand the need for a variety of foods in a diet *Sort and classify foods according to the sections of the Eatwell Plate *Design a fruit salad for a given criterion *Cut, peel, chop a range of ingredients * Work safely and hygienically * Say what they like and do not like about the product they have made	*Recognise how to make structures stronger. *Join appropriately different materials. *Test different methods to ensure the structures are stable. *Draw a labelled picture of their product help to describe their idea *Build a strong and stable piece of playground equipment

Year 3/4	Textiles- Seams, stiffening and strengthening, materials and fastenings	ICT and electrical systems-control and electrical components (motors/buzzers)		Food - Simple savoury foods and cooking techniques
Key Learning	*What stitches did you use for each section? *Why did you use that stitch or fastening? *Does your product meet the design specifications? *How should you securely join two pieces of fabric together?	*What do motors, buzzers and lights do? *How can you make a motor/ buzzer work using electricity? *What is good about your product and what would you improve on? *What is computer aided design?		*What tools do you need to complete your meal? * Use appropriate tools to peel, chop, slice, grate and mix ingredients. *Can we follow instructions/recipes? *Why did you choose to make this meal?
Year 5/6		Electrical Systems and Structures	<u>Textiles</u> Make do and mend	Cooking: healthy eating

Key Learning		*Make a structure that includes an electrical systems and computer system *understand and use series circuits incorporating: switches, bulbs, buzzers and motors]	*Join fabrics using over sewing, back stitch or blanket stitch. *Pin and tack pieces together. *Decorate textiles appropriately. *Use appropriate finishing	*Devise a step by step plan which can be read/followed by someone else. *Select and prepare food showing awareness of a healthy diet
		-	*Use appropriate finishing techniques. *Understand how fabrics can be strengthened, stiffened and reinforced where appropriate.	

Cycle B	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1/2		Mechanisms Design a moving picture using simple levers		<u>Textiles</u> Design and make finger/hand puppet	Food Technology Following a recipe	

Key Learning	*Explore the use of levers and sliders in books *Create how to make moving pictures using levers and sliders *Design a moving picture to match a given criterion * Evaluate their ideas throughout and at the end. *Record any changes made during the process		*Explore a range of hand and finger puppets. *Explore and test different ways of joining textiles, recognising which is the most appropriate method and why *Experiment with different decorating techniques * Use pictures and words to convey what finger puppet they want to design / make. *Use a template to cut out their finger puppet pieces * Join fabrics by using running stitch. *Decorate fabrics with attached items	*Grate, chop and peel a range of ingredients safely. *Measure and weigh food items. *Work safely and Hygienically * Discuss how their finished product meets the given criteria	
Year 3/4		Food Product for a purpose Eatwell plate		Structures Making structures for support	Mechanical Systems- Levers and Linkages
Key learning		*How is your meal healthy? *Which vegetables and fruits are seasonal? *Can you sort out you meal into the food groups?		*Can you use cross sectional diagrams? *How can you make a frame structure more stable? * Measure and mark square section, strip and dowel accurately to 1cm - Use tools accurately.	*Use mechanical systems such as gears, pulleys, levers and linkages. *Use lolly sticks/card to make levers. *Use linkages to make movement larger or more varied.

Year 5/6	Mechanical systems cams, pulleys and gears	Cooking linked to other cultures	Structures Making shelters (reinforcing/strengthening)
Key Learning	*Understand how gears, cams and pulleys can be used to speed up, slow down or change the direction of movement. *Select from a range of materials/tools. * Develop understanding of technical vocabulary and can explain to others.	*Know how to use utensils and equipment including heat sources to prepare and cook food. *Know where and how ingredients are grown and processed *Weigh and measure using scales. *Use a range of cooking techniques. *Work safely and hygienically.	*Create 3D products- use pattern layout *Stiffen and reinforce complex structures. *Join materials using appropriate methods. *Understand how to strengthen, stiffen and reinforce 3-D frameworks. *correct terminology for tools/,materials and different processes.