

		Cooking & Nutrition				
		Nursery	Reception	Year 1	Year 2	
	sig		<ul> <li>Designing a soup recipe as a class.</li> <li>Designing soup packaging.</li> </ul>	• Designing smoothie carton packaging by- hand or on ICT software.	• Designing a healthy wrap based on a food combination which work well together.	
	Make	<ul> <li>Explore chopping during snack time and fine motor activities.</li> <li>Explore cutting using scissors.</li> <li>Explore preparing fruits and vegetables that they will eat themselves.</li> </ul>	<ul> <li>Chopping plasticine safely.</li> <li>Chopping vegetables with support.</li> </ul>	• Independently chopping fruit and vegetables safely, using the claw grip, to make a smoothie.	<ul> <li>Slicing food safely using the bridge or claw grip.</li> <li>Constructing a wrap that meets a design brief.</li> </ul>	
Skills	Evaluate	• To talk about what fruits and vegetables they like and do not like.	<ul> <li>Tasting the soup and giving opinions.</li> <li>Describing some of the following when tasting food: look, feel, smell and taste.</li> <li>Choosing their favourite packaging design and explaining why</li> </ul>	<ul> <li>Tasting and evaluating different food combinations.</li> <li>Describing appearance, smell and taste.</li> <li>Suggesting information to be included on packaging</li> </ul>	<ul> <li>Describing the taste, texture and smell of fruit and vegetables.</li> <li>Taste testing food combinations and final products.</li> <li>Describing the information that should be included on a label.</li> <li>Evaluating which grip was most effective.</li> </ul>	
Knowledge		<ul> <li>To explore fruits and find seeds.</li> <li>To know that plants are grown.</li> <li>To know that we eat fruits and vegetables.</li> <li>To begin to understand some differences between fruits and vegetables.</li> </ul>	<ul> <li>To know that soup is ingredients (usually vegetables and liquid) blended together.</li> <li>To know that vegetables are grown.</li> <li>To recognise and name some common vegetables.</li> <li>To know that different vegetables taste different.</li> <li>To know that eating vegetables is good for us.</li> <li>To discuss why different packages might be used for different foods.</li> </ul>	<ul> <li>Understanding the difference between fruits and vegetables.</li> <li>To understand that some foods typically known as vegetables are fruits (e.g. cucumber, tomato).</li> <li>To know that a blender is a machine which mixes ingredients together into a smooth liquid.</li> <li>To know that a fruit has seeds and a vegetable does not.</li> <li>To know that fruits grow on trees or vines.</li> <li>To know that vegetables can grow either above or below ground.</li> <li>To know that vegetables can come from different parts of the plant (e.g. roots: potatoes, leaves: lettuce, fruit: cucumber).</li> </ul>	<ul> <li>To know that 'diet' means the food and drink that a person or animal usually eats.</li> <li>To understand what makes a balanced diet.</li> <li>To know where to find the nutritional information on packaging.</li> <li>To know that the five main food groups are: Carbohydrates, fruits and vegetables, protein, dairy and foods high in fat and sugar.</li> <li>To understand that I should eat a range of different foods from each food group, and roughly how much of each food group.</li> <li>To know that nutrients are substances in food that all living things need to make energy, grow and develop.</li> <li>To know that 'ingredients' means the items in a mixture or recipe.</li> <li>To know that I should only have a maximum of five teaspoons of sugar a day to stay healthy.</li> </ul>	



		• To know that many food and drinks we do not expect to contain sugar do; we call these 'hidden
		sugars'



		Mechanisms				
		Nursery	Reception	Year 1	Year 2	
	Design	<ul> <li>Talk about what they will make and how they will make it.</li> <li>Begin to talk about which parts will move.</li> </ul>	• Draw simple plans, including moving parts, with some labelling.	<ul> <li>Designing a vehicle that includes wheels, axles and axle holders, that when combined, will allow the wheels to move.</li> <li>Creating clearly labelled drawings that illustrate movement.</li> <li>Explaining how to adapt mechanisms, using bridges or guides to control the movement</li> <li>Designing a moving story book for a given audience.</li> </ul>	<ul> <li>Creating a class design criteria for a moving alien.</li> <li>Designing a moving monster for a specific audience in accordance with a design criteria.</li> <li>Selecting a suitable linkage system to produce the desired motion.</li> <li>Designing a wheel.</li> </ul>	
	Make	• Make designs with moving parts, that might not work as they should.	• Make designs using simple plans which include moving parts.	<ul> <li>Adapting mechanisms, when: <ul> <li>they do not work as they should.</li> <li>to fit their vehicle design.</li> <li>to improve how they work after testing their vehicle.</li> </ul> </li> <li>Following a design to create moving models that use levers and sliders.</li> </ul>	<ul> <li>Making linkages using card for levers and split pins for pivots.</li> <li>Experimenting with linkages adjusting the widths, lengths and thicknesses of card used.</li> <li>Cutting and assembling components neatly.</li> <li>Selecting materials according to their characteristics.</li> <li>Following a design brief.</li> </ul>	
Skills	Evaluate	• Discuss what they have made.	<ul> <li>Discuss what they have made, and which parts move.</li> <li>Identify that a part is not moving and begin to recognise why that might occur.</li> </ul>	<ul> <li>Testing wheel and axle mechanisms, identifying what stops the wheels from turning, and recognising that a wheel needs an axle in order to move.</li> <li>Testing a finished product, seeing whether it moves as planned and if not, explaining why and how it can be fixed.</li> <li>Reviewing the success of a product by testing it with its intended audience.</li> </ul>	<ul> <li>Evaluating own designs against design criteria.</li> <li>Using peer feedback to modify a final design.</li> <li>Evaluating different designs.</li> <li>Testing and adapting a design.</li> </ul>	



	<ul> <li>To know objects can have</li> </ul>	<ul> <li>To know which parts of an object</li> </ul>	<ul> <li>To know that wheels need to be round</li> </ul>	<ul> <li>To know that mechanisms are a collection of moving</li> </ul>
	moving parts.	move and discuss why.	to rotate and move.	parts that work together as a machine to
	<ul> <li>To begin to use simple</li> </ul>	<ul> <li>To use simple terms to discuss</li> </ul>	<ul> <li>To understand that for a wheel to</li> </ul>	produce movement.
	terms to discuss existing	existing moving mechanisms (round	move it must be attached to a rotating	<ul> <li>To know that there is always an input and output in a</li> </ul>
	moving mechanisms (round	and round, straight, up and down).	axle.	mechanism.
	and round, up and down).	<ul> <li>To explore different moving objects</li> </ul>	<ul> <li>To know that an axle moves within an</li> </ul>	• To know that an input is the energy that is used to start
		and describe their movement.	axle holder which is fixed to the vehicle	something working.
			or toy.	• To know that an output is the movement that happens
			<ul> <li>To know that the frame of a vehicle</li> </ul>	as a result of the input.
			(chassis) needs to be balanced.	<ul> <li>To know that a lever is something that turns on a</li> </ul>
			<ul> <li>To know that a mechanism is the parts</li> </ul>	pivot.
			of an object that move together.	<ul> <li>To know that a linkage mechanism is made up of a</li> </ul>
			<ul> <li>To know that a slider mechanism</li> </ul>	series of levers.
			moves an object from side to side.	To know that different materials have different
			<ul> <li>To know that a slider mechanism has a</li> </ul>	properties and are therefore suitable for different uses.
			slider, slots , guides and an object.	<ul> <li>To know the features of a ferris wheel include the</li> </ul>
e e			<ul> <li>To know that bridges and guides are</li> </ul>	wheel, frame, pods, a base an axle and an axle holder.
go			bits of card that purposefully restrict the	<ul> <li>To know that it is important to test my design as I go</li> </ul>
N N			movement of the slider.	along so that I can solve any problems that may occur.
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		Structures				
		Nursery	Reception	Year 1	Year 2	
	Design	•Discuss what they want to make and think about what they will need.	<ul> <li>Begin to draw a design and discuss what their design needs.</li> <li>Discuss what they will need to make their design.</li> <li>Making verbal plans and material choices.</li> <li>Developing a junk model.</li> <li>Designing a junk model boat.</li> <li>Using knowledge from exploration to inform design.</li> </ul>	<ul> <li>Learning the importance of a clear design criteria.</li> <li>Including individual preferences and requirements in a design.</li> </ul>	<ul> <li>Generating and communicating ideas using sketching and modelling.</li> <li>Learning about different types of structures, found in the natural world and in everyday objects.</li> </ul>	
	Make	<ul> <li>Aligning, arranging and balancing objects.</li> <li>Explore joining objects together.</li> <li>Explore folding paper and card.</li> </ul>	<ul> <li>Begin to make stable structures using a range or materials.</li> <li>Explore different ways of joining objects.</li> <li>Begin to fold paper and card for a design.</li> <li>Improving fine motor/scissor skills with a variety of materials.</li> <li>Joining materials in a variety of ways (temporary and permanent).</li> <li>Joining different materials together.</li> <li>Describing their junk model, and how they intend to put it together.</li> <li>Making a boat that floats and is waterproof, considering material choices.</li> </ul>	<ul> <li>Making stable structures from card, tape and glue .</li> <li>Learning how to turn 2D nets into 3D structures.</li> <li>Following instructions to cut and assemble the supporting structure of a windmill.</li> <li>Making functioning turbines and axles which are assembled into a main supporting structure</li> </ul>	<ul> <li>Making a structure according to design criteria.</li> <li>Creating joints and structures from paper/card and tape.</li> <li>Building a strong and stiff structure by folding paper.</li> </ul>	
Skills	Evaluate	<ul> <li>Discuss what they have made and what they like about it.</li> <li>Begin to identify what parts they would improve.</li> </ul>	<ul> <li>Decide whether their creation is stable based on their own design.</li> <li>Begin to identify ways to make their creation more stable.</li> <li>Giving a verbal evaluation of their own and others' junk models with adult support.</li> <li>Checking to see if their model matches their plan.</li> <li>Considering what they would do differently if they were to do it again.</li> <li>Describing their favourite and least favourite part of their model</li> <li>Making predictions about, and evaluating different materials to see if they are waterproof.</li> <li>Making predictions about, and evaluating existing boats to see which floats best.</li> </ul>	<ul> <li>Evaluating a windmill according to the design criteria, testing whether the structure is strong and stable and altering it if it isn't.</li> <li>Suggest points for improvements</li> </ul>	<ul> <li>Exploring the features of structures.</li> <li>Comparing the stability of different shapes.</li> <li>Testing the strength of own structures.</li> <li>Identifying the weakest part of a structure.</li> <li>Evaluating the strength, stiffness and stability of own structure.</li> </ul>	



	<ul> <li>Testing their design and reflecting on what could have been done differently.</li> <li>Investigating the how the shapes and structure of a boat affect the way it moves.</li> </ul>		
• 10 understand that structures can fall, break or bend. • To know that buildings are built and should not fall or break.	<ul> <li>To begin to understand what the term stable means and begin to apply this to their designs.</li> <li>To begin to understand what makes a design strong or stable.</li> <li>To know there are a range to different materials that can be used to make a model and that they are all slightly different.</li> <li>Making simple suggestions to fix their junk model.</li> <li>To know that 'waterproof' materials are those which do not absorb water.</li> </ul>	<ul> <li>To understand that the snape of materials can be changed to improve the strength and stiffness of structures.</li> <li>To understand that cylinders are a strong type of structure (e.g. the main shape used for windmills and lighthouses).</li> <li>To understand that axles are used in structures and mechanisms to make parts turn in a circle.</li> <li>To begin to understand that different structures are used for different purposes.</li> <li>To know that a structure is something that has been made and put together.</li> </ul>	<ul> <li>To know that snapes and structures with wide, flat bases or legs are the most stable.</li> <li>To understand that the shape of a structure affects its strength.</li> <li>To know that materials can be manipulated to improve strength and stiffness.</li> <li>To know that a structure is something which has been formed or made from parts.</li> <li>To know that a 'stable' structure is one which is firmly fixed and unlikely to change or move.</li> <li>To know that a 'strong' structure is one which does not break easily.</li> <li>To know that a 'stiff' structure or material is one which does not bend easily</li> </ul>



		Textiles				
		Nursery	Reception	Year 1	Year 2	
	Design		<ul> <li>Discussing what effective design needs.</li> <li>Designing a simple pattern with paper.</li> <li>Designing a bookmark.</li> <li>Choosing from available materials</li> </ul>	<ul> <li>Using a template to create a design for a puppet.</li> </ul>	• Designing a pouch.	
	Make	<ul> <li>Explore cutting different materials using scissors.</li> <li>Exploring threading and wrapping string or wool.</li> </ul>	<ul> <li>Developing fine motor/cutting skills with scissors.</li> <li>Exploring fine motor/threading and weaving (under, over technique) with a variety of materials.</li> <li>Using a prepared needle and wool to practise threading</li> </ul>	<ul> <li>Cutting fabric neatly with scissors.</li> <li>Using joining methods to decorate a puppet.</li> <li>Sequencing steps for construction.</li> </ul>	<ul> <li>Selecting and cutting fabrics for sewing.</li> <li>Decorating a pouch using fabric glue or running stitch.</li> <li>Threading a needle.</li> <li>Sewing running stitch, with evenly spaced, neat, even stitches to join fabric.</li> <li>Neatly pinning and cutting fabric using a template.</li> </ul>	
Skills	Evaluate	• Talking about existing products and sharing some opinions.	• Reflecting on a finished product and comparing to their design.	• Reflecting on a finished product, explaining likes and dislikes.	<ul> <li>Troubleshooting scenarios posed by teacher.</li> <li>Evaluating the quality of the stitching on others' work.</li> <li>Discussing as a class, the success of their stitching against the success criteria.</li> <li>Identifying aspects of their peers' work that they particularly like and why.</li> </ul>	
Knowledge		<ul> <li>To know names for some different materials.</li> <li>To know that materials can be put together when making.</li> </ul>	<ul> <li>To know that a design is a way of planning our idea</li> <li>before we start.</li> <li>To know that threading is putting one material</li> <li>through an object.</li> </ul>	<ul> <li>To know that 'joining technique' means connecting two pieces of material together.</li> <li>To know that there are various temporary methods of joining fabric by using staples. glue or pins.</li> <li>To understand that different techniques for joining materials can be used for different purposes.</li> <li>To understand that a template (or fabric pattern) is used to cut out the same shape multiple times.</li> <li>To know that drawing a design idea is useful to see how an idea will look.</li> </ul>	<ul> <li>To know that sewing is a method of joining fabric.</li> <li>To know that different stitches can be used when sewing.</li> <li>To understand the importance of tying a knot after sewing the final stitch.</li> <li>To know that a thimble can be used to protect my fingers when sewing</li> </ul>	

