

# KSI DT

	Autumn	Spring	Summer
<b>Year 1</b>	Mechanisms: Making a Moving Storybook	Structures: Constructing a Windmill	Cooking and Nutrition: Smoothies
Knowledge	<p>To know that a mechanism is the parts of an object that move together.</p> <p>To know that a slider mechanism moves an object from side to side.</p> <p>To know that a slider mechanism has a slider, slots, guides and an object.</p> <p>To know that bridges and guides are bits of card that purposefully restrict the movement of the slider.</p>	<p>To understand that the shape of materials can be changed to improve the strength and stiffness of structures.</p> <p>To understand that cylinders are a strong type of structure (and, therefore, they are the main shape used for windmills and lighthouses).</p> <p>To understand that axles are used in structures and mechanisms to make parts turn in a circle.</p> <p>To begin to understand that different structures are used for different purposes.</p> <p>To know that a structure is something that has been made and put together.</p>	<p>That a blender is a machine which mixes ingredients together into a smooth liquid.</p> <p>That a fruit has seeds and a vegetable does not.</p> <p>That fruits grow on trees or vines.</p> <p>That vegetables can grow either above or below ground.</p> <p>That vegetables are any edible part of a plant.</p>
Vocabulary	Sliders, mechanism, adapt, design criteria, Design, input, model, template, assemble, test	Axle, bridge, design, design criteria, model, net, packaging, structure, template, unstable, stable, strong, weak	Blend, end, chopping board, compare, cut, evaluate, flavour, fork, fruit, healthy, ingredients, juice, juicer, leaf, plant, recipe, root, seed, select, smoothie, stem, table knife, taste, tree, vegetable, vine
<b>Year 2</b>	Cooking and Nutrition: Balanced Diet	Textiles: Pouches	Mechanisms: Making a Moving Monster
Knowledge	<p>That 'diet' means the food and drink that a person or animal usually eats.</p> <p>What makes a balanced diet?</p> <p>That the five main food groups are: carbohydrates, fruits and vegetables, protein, dairy and oils and spreads.</p>	<p>To know that sewing is a method of joining fabric.</p> <p>To know that different stitches can be used when sewing.</p> <p>To understand the importance of tying a knot after sewing the final stitch.</p>	<p>To know that mechanisms are a collection of moving parts that work together as a machine to produce movement.</p> <p>To know that there is always an input and an output in a mechanism.</p>

	<p>That I should eat a range of different foods from each food group, and roughly, how much of each food group.</p> <p>That 'ingredients' means the items in a mixture or recipe.</p> <p>How to cut, grate, snip and spread to prepare foods.</p> <p>How to review and give a score to evaluate.</p>	<p>To know that a thimble can be used to protect my fingers when sewing.</p>	<p>To know that an input is the energy that is used to start something working.</p> <p>To know that an output is the movement that happens as a result of the input.</p> <p>To know that a lever is something that turns on a pivot.</p> <p>To know that a linkage mechanism is made up of a series of levers.</p>
Vocabulary	<p>Appearance, balanced, carbohydrates, chopping board, combination, cut, dairy, design, design brief, diet, evaluate, feel, fruit, grate, grater, ingredients, menu, oils, proteins, review, scissors, smell, snip, spread, spreads, table knife, taste</p>	<p>Decorate, fabric, fabric glue, knot, needle, needle threader, running stitch, sew, template, thread</p>	<p>Axle, design criteria, input, linkage, mechanical, output, pivot wheel</p>

LKS2 DT

	Autumn	Spring	Summer
Year 3	Mechanical Systems: Pneumatic Toy	Cooking and Nutrition: Eating Seasonally- Seasonal Tarts	Textiles: Cross Stitch and Applique
Knowledge	<p>To understand how pneumatic systems work.</p> <p>To understand that pneumatic systems can be used as part of a mechanism.</p> <p>To know that pneumatic systems operate by drawing in, releasing and compressing air.</p>	<p>That seasonal means foods that grow in a given season in a given country.</p> <p>Some seasonal foods that grow in the UK and what season they grow in.</p> <p>That eating seasonal foods can have a positive impact on the environment.</p> <p>How to describe the flavour and texture of foods.</p> <p>How to cut and peel safely.</p> <p>That the appearance of food is as important as taste.</p> <p>That similar coloured fruits and vegetables often have similar nutritional benefits.</p>	<ul style="list-style-type: none"> <li>To know that appliqué is a way of mending or decorating a textile by applying smaller pieces of fabric.</li> <li>To understand that a product's function relies on material choices.</li> <li>To identify and explain some materials and explain their aesthetic and/or functional properties.</li> </ul>
Vocabulary	Mechanism: lever, pivot, linkage system, pneumatic system, input, output, component, thumbnail sketch, research, adapt, properties, reinforce, motion	Appearance, arid, climate, complementary, country, cut, design, evaluate, export, fruit, grate, import ingredients, Mediterranean, mock-up, mountain, peel, polar, seasonal, seasons, snip, taste, temperate, texture, tropical, vegetable, weather	Appliqué, cross-stitch, fabric, running stitch, patch, thread, embellish, template, cotton, silk, polyester, wrinkle, tear, water resistant, breathable, matt, shiny, biodegrade, pinking
Year 4	Cooking and Nutrition: Adapting a Recipe- Biscuits	Electrical Systems: Torch Making	Structures: Pavilions
Knowledge	<p>That the amount of an ingredient in a recipe is known as the 'quantity'.</p> <p>That safety and hygiene are important when cooking.</p> <p>The following cooking techniques: sieving, measuring, mixing/stirring, cutting out and shaping.</p>	<p>To understand that electrical conductors are materials which electricity can pass through.</p> <p>To understand that electrical insulators are materials which electricity cannot pass through.</p> <p>To know that a battery contains stored electricity that can be used to power products.</p> <p>To know that an electrical circuit must be complete for electricity to flow.</p>	<p>To understand what a frame structure is.</p> <p>To know that a 'free-standing' structure is one that can stand on its own.</p> <p>To know that a pavilion is a decorative building or structure for leisure activities.</p> <p>To know that cladding can be applied to structures for different effects.</p>

	The importance of budgeting while planning ingredients for a recipe. That products often have a target audience.	To know that a switch can be used to complete and break an electrical circuit.	To know that aesthetics are how a product looks.
Vocabulary	Cream, crunchy, cuboid, cut, design, evaluate, fold, hygiene, ingredients, layout, market research, modify, multiplication, opinion, pounds, sieve, sift, target audience, taste, texture, unique, Wooden Spoon	Electricity, insulator, series circuit, switch, component, design, design criteria, diagram, evaluation, LED, model, shape, target audience, input, recyclable, theme, aesthetics, assemble, equipment, ingredients, packaging, properties, sketch, test	3D shapes, Cladding, Design criteria, Innovative, Natural, Reinforce, Structure

UKS2 DT

	Autumn	Spring	Summer
Year 5	Cooking and Nutrition: Developing a Recipe- Bolognese	Mechanical Systems: Making a Pop-Up Book	Electrical Systems- Doodlers
Knowledge	<p>That beef comes from cows reared on farms.</p> <p>That recipes can be adapted to suit nutritional needs and dietary requirements.</p> <p>That nutritional information is found on food packaging.</p> <p>That coloured chopping boards can prevent cross-contamination.</p> <p>That food packaging serves many purposes.</p>	<p>To know that mechanisms control movement.</p> <p>To understand that mechanisms can be used to change one kind of motion into another.</p> <p>To understand how to use sliders, pivots and folds to create paper-based mechanisms.</p> <p>To know that a design brief is a description of what I am going to design and make.</p> <p>To know that designers often want to hide mechanisms to make a product more aesthetically pleasing.</p>	<p>To know that, in a series circuit, electricity only flows in one direction.</p> <p>To know when there is a break in a series circuit, all components turn off.</p> <p>To know that an electric motor converts electrical energy into rotational movement, causing the motor's axle to spin.</p> <p>To know a motorised product is one which uses a motor to function.</p>
Vocabulary	Abattoir, adaptation, balanced, beef, brand, cook, cross-contamination, cut, design, enhance, equipment, evaluate, farm, grate, hygiene, ingredients, label, measure, nutrient, nutrition, nutritional value, preference, press, process, recipe, safety, theme	Design, input, motion, mechanism, criteria, research, reinforce model	circuit component, configuration, current, develop, DIY, investigate, motor, motorised, problem solve, product analysis, series circuit, stable, target user
Year 6	Cooking and Nutrition: Come Dine With Me	Structures: Playgrounds	Textiles: Leavers Waistcoat
Knowledge	<p>That 'flavour' is how a food or drink tastes.</p> <p>That many countries have 'national dishes' which are recipes associated with that country.</p>	<p>To know that structures can be strengthened by manipulating materials and shapes.</p> <p>To understand what a 'footprint plan' is.</p>	<p>To understand that it is important to design clothing with the client/target customer in mind.</p> <p>To know that using a template (or clothing pattern) helps to accurately mark out a design on fabric.</p>

	<p>That 'processed food' means food that has been put through multiple changes in a factory;</p> <p>That it is important to wash fruit and vegetables before eating to remove any dirt and insecticides.</p> <p>What happens to a certain food before it appears on the supermarket shelf (farm to fork).</p>	<p>To understand that in the real world, design can impact users in positive and negative ways.</p> <p>To know that a prototype is a cheap model to test a design idea.</p>	<p>To understand the importance of consistently sized stitches.</p>
Vocabulary	<p>Balance, bitter, bridge method, complement, cookbook, cross-contamination, enhance, equipment, farm to fork, flavours, ingredients, method, research, pairing, recipe, preparation, salty, sour, storyboard, sweet, umami</p>	<p>Apparatus, design criteria, equipment, playground Landscape, features, cladding</p>	<p>Annotate, decorate, design criteria, fabric, target customer, waistcoat, waterproof</p>