

	Term 1	Term 2	Term 3
Unit of work	Mechanisms - Sliders and Levers Project -Making a moving image	Food – Preparing fruit and vegetables Project - Making a fruit salad	Structures - Freestanding structures Project - Making a mini greenhouse
Link to Programme of study	Design • Design purposeful, functional, appealing products for a range of users • Use given design criteria • Generate, develop and communicate ideas through talking, drawing, templates, mock-ups and ICT (when appropriate) Make • Select and use a range of tools and equipment • Use skills such as cutting, shaping, joining and finishing • Select and use a wide range of materials and components according to characteristics (functional and aesthetic) Evaluate • Explore and evaluate a range of existing products • Evaluate ideas and products against given design criteria Technical knowledge • Build structures • Explore how structures can be made stronger, stiffer and more stable • Explore and use mechanisms (levers, sliders, wheels, axles) Cooking and nutrition • Use the basic principles of a healthy and varied diet to prepare dishes • Understand where food comes from.		
Composite knowledge (questions to be answered)	What is a slider? What is a lever? Which part of the mechanism is a pivot?	How many different types of fruit are available? What vocab can you use to describe the smell, taste and texture of different fruit? Why do we need fruit and veg to have a balanced diet? How do we prepare food in a safe way?	What is a freestanding structure? How can we stop freestanding structures from falling over? How can we make a structure stronger, stiffer and more stable?
Component knowledge Intentional knowledge they need to understand)	Understand that different mechanisms produce different types of movement Describe how a slider moves Describe how a lever works	Explain the importance of having fruit and vegetables as part of a balanced diet Recognise different types of fruit Demonstrate how to prepare food in a safe way	Recognise and describe what a freestanding structure is Observe and construct different methods to prevent a freestanding structure from falling over

	Identify the pivot		Demonstrate different techniques to make a structure stronger, stiffer and more stable
Key knowledge and skills for assessment	Children can use scissors to cut material with some accuracy to create levers and sliders. Children can use familiar materials to decorate and embellish. Children will understand the movement of simple sliders and levers. Children can evaluate final products and discuss them.	Children can understand that a balanced diet is important to stay healthy. Children can discuss how to prepare food safely. Children can understand where some fruits and vegetables come from. Children can use safety knives to cut fruit with some accuracy and control. Children can consider ingredients and preferences when designing. Children can evaluate final products and discuss them.	Children can understand what a freestanding structure is. Children can consider how to make simple structures stronger, stiffer, or more stable. Children can consider materials and their different properties and purposes. Children can evaluate final products and discuss them.
Vocabulary	slider, lever, pivot, design, make, evaluate, user, purpose	slicing, peeling, cutting, squeezing, healthy diet, ingredients, planning, investigating	framework, weak, strong, metal, wood, plastic
Links to prior knowledge	Early experiences of working with paper and card to make simple flaps and hinges. Experience of simple cutting, shaping and joining skills using scissors, glue, paper fasteners and masking tape.	Experience of common fruit and vegetables, undertaking sensory activities i.e. appearance taste and smell. Experience of cutting soft fruit and vegetables using appropriate utensils.	Experience of using construction kits to build walls, towers and frameworks. Experience of using of basic tools e.g. scissors or hole punches with construction materials e.g. plastic, card. Experience of different methods of joining card and paper.

Cross-curricular links	Mathematics – describe position, direction and movement. Use appropriate standard and nonstandard measures. Art and design – use colour, pattern, line, shape. Spoken language – participate in discussion about books and other products with moving parts, taking turns and listening to what others say. Ask relevant questions to extend their knowledge and understanding. Build technical and directional vocabulary.	Science – understand that plants have leaves, stems, roots, flowers and fruits; understand the importance of growing plants and how seasons affect growth. Writing – develop descriptive writing based on first-hand experience of tasting fruit and vegetables. Mathematics – carry out a simple survey to find out which are the favourite fruits/vegetables; construct and interpret the information in e.g. pictograms and bar graphs. Writing – instructions on how to use one of the utensils; how to prepare e.g. a fruit for eating. Science – talk about a balanced diet, different types of food and hygiene. Geography – regions food comes from, where food is grown Spoken language – children develop and use a sensory vocabulary, ask questions to check understanding; use the correct terminology for equipment and food processes.	Mathematics – use appropriate standard and non-standard measures. Recognise and name common 2-D and 3-D shapes. Science – think about the properties of materials that make them suitable or unsuitable for particular purposes. Geography – use simple fieldwork and observational skills to study the geography of their school and its grounds and the key physical features of its surrounding environment. Spoken language – participate in discussion about various structures, taking turns and listening to what others say. Ask relevant questions to extend their knowledge and understanding. Build technical vocabulary.
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