Year 2: Autumn



Enquiry Question	How can we make a pouch using a running stitch?						
	Required Prior Knowledge		Knowledge to be taught				
Substantive Knowledge	 Materials can be joined together using glue and tape. (Reception Autumn 1) Different ways to join materials e.g. folding, taping, stapling, threading. (Reception Spring 1) Sewing is a method of joining fabric. Different stitches can be used when sewing. It is important to tie a knot after sewing the final stitch. A thimble can be used to protect my fingers when sewing. 			j. final stitch. s when sewing.			
Disciplinary Knowledge							
Design	Design a pouch.						
Make	 Select and cut fabrics for sewing. Decorate a pouch using fabric glue or running stitch. Thread a needle Sew a running stitch, with evenly spaced, neat, even stitches to join fabric. Neatly pin and cut fabric using a template. 						
Evaluate	 Evaluate the quality of the stitching on others' work. Discuss as a class, the success of their stitching against the success criteria. Identify aspects of their peers' work that they particularly like and why. 						
Vocabulary	decorate, fabric, fabric glue, knot, needle, needle threader, running stitch, sew, template, thread						
Teaching Sequence	 Explore examples Make connections to previous learning Make closer observations through sketching Make closer observations 	Design own project	Apply skills and knowledge learned to own project	ASSESSMENT Evaluate own work			



Learning Questions	What is a running stitch?	What is a template?	Can I design my own pouch?	Can I construct my own pouch?	Can I evaluate my finished project?
Mastery Keys	Can design and make a pouch with evenly sized running stitches.				



Year 2: Spring Mechanisms: Making a Moving Monster



Enquiry Question	How can we make a model move using levers and sliders?				
	Required Prior Knowledge	Knowledge to be taught			
Substantive Knowledge	 Wheels need to be round to rotate and move. For a wheel to move it must be attached to a rotating axle. An axle moves within an axle holder which is fixed to the vehicle or toy. The frame of a vehicle (chassis) needs to be balanced. Some real-life items that use wheels such as wheelbarrows, hamster wheels and vehicles. (Year 2 Spring) Mechanisms are a collection of moving parts that work together as a machine to produce movement. There is always an input and an output in a mechanism. An input is the energy that is used to start something working. An output is the movement that happens as a result of the input. A lever is something that turns on a pivot. A linkage mechanism is made up of a series of levers 				
Disciplinary Knowledge					
Design	 Create a design criteria for a moving monster as a class. Design a moving monster for a specific audience in accordance with a design criteria. 				
Make	 Make linkages using card for levers and split pins for pivots. Experiment with linkages adjusting the widths, lengths and thicknesses of card used. Cut and assemble components neatly. 				
Evaluate	 Evaluate own designs against design criteria. Use peer feedback to modify a final design. 				
Vocabulary	axle, design criteria, input, linkage, mechanical, output, pivot, wheel, series, lever				
Teaching Sequence	 Explore examples Make connections to previous learning Make closer observations through sketching Model key techniques for children to try Practise techniques/make a prototype Design own project 	Apply skills and knowledge learned to own project ASSESSMENT Evaluate own work			



Learning Questions	How do objects move?	What are linkages?	Can I design my own moving monster?	Can I construct my own moving monster?	Can I evaluate my finished project?
Mastery Keys	Can design and make a model with levers and pivots and neatly assembled components.				







Enquiry Question	How can we make a sandwich wrap that contains all the food groups?						
	Required Prior Knowledge	Knowledge to be taught					
Substantive Knowledge	 Understand that they need to eat different foods (Reception Science) Identify foods that come from plants (Y1 Science) Understand the term balanced, hygiene, germs, diet and some food groups (Y2 Science Autumn) 	 Diet means the food and drink that a person or animal usually eats. What makes a balanced diet The five main food groups are: carbohydrates, fruits and vegetables, protein, dairy and oils and spreads. We should eat a range of different foods from each food group, and roughly how much of each food group. Ingredients means the items in a mixture or recipe 					
Disciplinary Knowledge							
Design	Design three wrap ideas based on a food combination which work well together.						
Make	 Chop foods safely to make a wrap. Grate food to make a wrap. Spread soft foods to make a wrap Identify the five food groups 						
Evaluate	 Taste and evaluate different food combinations. Describe appearance, smell and taste. Describe the information that should be included on a label. Evaluate food by giving it a score. 						
Vocabulary	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, vegetables						
Teaching Sequence	 Explore examples Model key techniques for children to try Make connections to previous learning Make closer observations 	Design own project Apply skills and knowledge learned to own project Evaluate own work					



	through sketching					
Learning Questions	What are food groups?	How should food groups be balanced within a meal?	How do we prepare certain foods?	Can I design my own wrap based on criteria?	Can I create my own wrap?	Can I evaluate my wrap against design criteria?
Mastery Keys	Can design and create a healthy balance wrap by chopping, grating and spreading foods effectively.					

