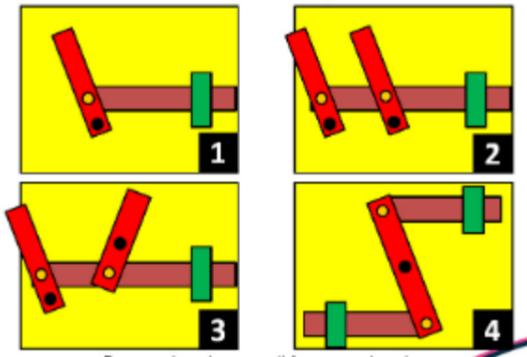


DT Unit of Work
Year 1 Autumn - Mechanisms

Unit	Prior learning (Retrieval)	Future learning	Common Misconceptions
<p>Final piece: Mechanism Leavers & Linkages Christmas Card</p> 	<ul style="list-style-type: none"> • Ask questions about a range of existing products. • Talk about what they intend to do • Say who and what their products are for • Draw their ideas before they make. • Discuss the reasons for choosing. • Understand procedures for safety and hygiene. • Talk about what they like about their product. • 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 and masking tape. 	<p><u>Design</u> Generate ideas based on simple design criteria and their own experiences, explaining what they could make.</p> <ul style="list-style-type: none"> • Develop, model and communicate their ideas through drawings and mock-ups with card and paper. <p><u>Make</u></p> <ul style="list-style-type: none"> • Plan by suggesting what to do next. • Select and use tools, explaining their choices, to cut, shape and join paper and card. • Use simple finishing techniques suitable for the product they are creating. <p><u>Evaluate</u></p> <ul style="list-style-type: none"> • Explore a range of existing books and everyday products that use simple sliders and levers. • Evaluate their product by discussing how well it works in relation to the purpose and the user and whether it meets design criteria. 	
<p>National Curriculum Subject Content:</p>	<p><u>Key stage 1</u> Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment]. When designing and making, pupils should be taught to:</p> <p><u>Design</u></p> <ul style="list-style-type: none"> - design purposeful, functional, appealing products for themselves and other users based on design criteria - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology <p><u>Make</u></p> <ul style="list-style-type: none"> - select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] - select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics <p><u>Evaluate</u></p> <ul style="list-style-type: none"> - explore and evaluate a range of existing products - evaluate their ideas and products against design criteria <p><u>Technical knowledge</u></p> <ul style="list-style-type: none"> - build structures, exploring how they can be made stronger, stiffer and more stable - explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. 		
<p>Design Knowledge:</p>	<ul style="list-style-type: none"> • Explore and use sliders and levers. • Understand that different mechanisms produce different types of movement. • Know and use technical vocabulary relevant to the project. 		
<p>Knowledge Sequence:</p>		<p>Key Vocabulary</p>	
<p>Intended Knowledge Substantive</p>	<p>Lesson 1 – Evaluate LC: I can evaluate different types of Christmas cards</p> <p>Lesson 2 – Explore LC: I can identify different sliders and leavers</p> <p>Lesson 3 – Develop Skills LC: I can create a model leaver with a partner</p> <ul style="list-style-type: none"> - Children to problem solve <p>Lesson 4 – Design LC: I can design a Christmas card</p> <p>Lesson 5 – Create Final Piece LC: I can create a final piece</p> <p>Lesson 6 – Evaluate I can evaluate my final piece.</p>		<p><u>Mechanisms</u> slider, lever, pivot, slot, bridge/guide, join, pull, push, up, down, straight, curve, forwards, backwards, design, make, evaluate, user, purpose, ideas, design criteria, product, function</p>
<p>Assessment Outcomes</p>	<ul style="list-style-type: none"> • Make a product which moves • Develop my own ideas and design a simple plan through drawings and discussion with others before making. • Select and use appropriate tools safely, explaining their choices. 		
<p>Significant people/places</p>	<ul style="list-style-type: none"> • 		
<p>Resources</p>	<p>https://www.youtube.com/watch?v=SinLvPGySmQ - Levers and Linkages how to?</p> <p>https://www.youtube.com/watch?v=1kC4uX2BoDw – Levers and Linkages how to?</p>		

Examples of work



Examples Final Piece



**DT Unit of Work
Year 1 Spring- Food**

Unit Food	Prior learning (Retrieval)	Future learning	Common Misconceptions
<p>Final piece: Making a packed lunch</p> 	<ul style="list-style-type: none"> • Ask questions about a range of existing products. • Talk about what they intend to do • Understand procedures for safety and hygiene. • Say who and what their products are for • Discuss the reasons for choosing. • Develop practical skills and techniques using a range of food. • Talk about what they like about their product. • Experience of common fruit and vegetables, undertaking sensory activities,(taste and smell). • Experience of cutting soft fruit and vegetables using appropriate utensils. 	<p><u>Design</u></p> <ul style="list-style-type: none"> • Design appealing products for a particular user based on simple design criteria. • Generate initial ideas and design criteria through investigating a variety of fruit and vegetables. • Communicate these ideas through talk and drawings. <p><u>Make</u></p> <ul style="list-style-type: none"> • Use simple utensils and equipment to e.g. peel, cut, slice, squeeze, grate and chop safely. • Select from a range of fruit and vegetables according to their characteristics e.g. colour, texture and taste to create a chosen product. <p><u>Evaluate</u></p> <ul style="list-style-type: none"> • Taste and evaluate a range of fruit and vegetables to determine the intended user’s preferences. • Evaluate ideas and finished products against design criteria, including intended user and purpose. 	
<p>National Curriculum Subject Content:</p>	<p><u>Key stage 1</u> Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment]. When designing and making, pupils should be taught to:</p> <p><u>Design</u></p> <ul style="list-style-type: none"> - design purposeful, functional, appealing products for themselves and other users based on design criteria - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology <p><u>Make</u></p> <ul style="list-style-type: none"> - select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] - select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics <p><u>Evaluate</u></p> <ul style="list-style-type: none"> - explore and evaluate a range of existing products - evaluate their ideas and products against design criteria <p><u>Technical knowledge</u></p> <ul style="list-style-type: none"> - build structures, exploring how they can be made stronger, stiffer and more stable - explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. <p><u>Cooking and nutrition</u> As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life. Pupils should be taught to:</p> <p><u>Key stage 1</u></p> <ul style="list-style-type: none"> - use the basic principles of a healthy and varied diet to prepare dishes - understand where food comes from. 		
<p>Design Knowledge:</p>	<ul style="list-style-type: none"> • Understand where a range of fruit and vegetables come from e.g. farmed or grown at home. • Understand and use basic principles of a healthy and varied diet to prepare dishes. • Know and use technical and sensory vocabulary relevant to the project. 		
<p>Knowledge Sequence:</p>		<p>Key Vocabulary</p>	
<p>Intended Knowledge Substantive</p>	<p>Lesson 1 – Explore LC: I can identify what makes up a balanced diet</p> <ul style="list-style-type: none"> - Healthy Eating: An introduction for children aged 5-11 videos - Follow on videos discuss different food groups: <ul style="list-style-type: none"> - Foods we need to eat less often -Starchy Carbohydrates -Protein -Fruit & Vegetables 		<p><u>Food</u> Names of fruit and vegetables, utensils and equipment, sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard, flesh, skin, seed, pip, core, slicing, peeling, cutting,</p>

	<p>-Dairy</p> <p>Lesson 2 – Evaluate LC: I can evaluate a variety of packed lunches - Sort pictures of food to create a healthy packed lunch, discuss choices</p> <p>Lesson 3 – Develop Skills LC: I can explore healthy choices through my senses - Children taste a variety of healthy choices and discuss what they would like in their packed lunch - Discuss including a range of foods including treats and the importance of a balanced diet</p> <p>Lesson 4 – Design LC: I can designed a healthy packed lunch</p> <p>Lesson 5 – Create Final Piece LC: I can make a healthy packed lunch - Children create a healthy sandwich or wrap - Children choose what else they would like to include (theoretically) - E.g. 'I have made a ham and cucumber wrap I would also include carrot sticks and a yoghurt'</p> <p>Lesson 6 – Evaluate LC: I can evaluate my packed lunch</p>	<p>squeezing, healthy diet, design, evaluate</p>
<p>Assessment Outcomes</p>	<ul style="list-style-type: none"> • Use simple utensils and equipment to e.g. peel, cut, slice, squeeze, grate and chop safely • Taste and evaluate a range of fruit and vegetables and determine the intended user's preferences • Use my own ideas and explain to others how I want to make my product 	
<p>Significant people/places</p>	<ul style="list-style-type: none"> • Jamie Oliver- British chef • Nigella Lawson – Chef 	
<p>Resources</p>	<p>Healthy Eating: An introduction for children aged 5-11 https://www.youtube.com/watch?v=mMHVEFWNLMc</p>	
<p>Examples of work</p>	 <p>The image shows a graphic titled 'Healthy Eating Lunch Savvy' with a heart icon. Below the title is the text 'Pick out foods for a healthy diet to put in your lunchbox.' To the right of the text is a collection of various food items including bread, cheese, fruit, vegetables, and drinks.</p>	
<p>Examples Final Piece</p>	 <p>The image shows two examples of final pieces. On the left is a yellow lunchbox filled with various food items like carrots, bread, and fruit. On the right is a hand-drawn poster titled 'Healthy lunch for a healthier me' with a circular diagram showing a sandwich, fruit, and vegetables. Below the diagram is the text 'A veggie a day is the healthiest way'.</p>	

DT Unit of Work

Year 1 Summer - Structures & Textiles (Market Place)

Unit Food	Prior learning (Retrieval)	Future learning	Common Misconceptions
<p>Final piece: Structures Rockets</p> 	<ul style="list-style-type: none"> • Ask questions about a range of existing products. • Say who and what their products are for • Draw their ideas before they make. • Discuss the reasons for choosing. • Understand procedures for safety and hygiene. • Talk about what they like about their product. • Experience of using construction kits to build walls, towers and frameworks. • Experience of using of basic tools • Experience of different methods of joining card and paper. 	<p><u>Design</u></p> <ul style="list-style-type: none"> • Generate ideas based on simple design criteria and their own experiences, explaining what they could make. • Develop, model and communicate their ideas through drawings and mock-ups with card and paper. <p><u>Make</u></p> <ul style="list-style-type: none"> • Plan by suggesting what to do next. • Select and use tools, explaining their choices, to cut, shape and join paper and card. • Use simple finishing techniques suitable for the product they are creating. <p><u>Evaluate</u></p> <ul style="list-style-type: none"> • Explore a range of existing books and everyday products that use simple sliders and levers. • Evaluate their product by discussing how well it works in relation to the purpose and the user and whether it meets design criteria. 	
<p>Final Piece: Market Place Textiles</p> 	<ul style="list-style-type: none"> • Ask questions about a range of existing products. • Talk about what they intend to do • Draw their ideas before they make. • Discuss the reasons for choosing. • Understand procedures for safety and hygiene. • Talk about what they like about their product. • Explored and used different fabrics. • Cut and joined fabrics with simple techniques. • Thought about the user and purpose of products. 	<p><u>Design</u></p> <ul style="list-style-type: none"> • Generate, develop, model and communicate their ideas as appropriate through talking, drawing, templates, mock-ups and ICT • Select from and use a range of tools and equipment to perform practical tasks such as marking out, cutting, joining and finishing. • Select from and use textiles according to their characteristics. <p><u>Make</u></p> <ul style="list-style-type: none"> • Select from and use a range of tools and equipment to perform practical tasks • Select from and use textiles according to their characteristics. <p><u>Evaluate</u></p> <ul style="list-style-type: none"> • Explore and evaluate a range of existing textile products relevant to the project being undertaken. • Evaluate their ideas throughout and their final products against original design criteria. • Design a functional and appealing product for a chosen user and purpose based on simple design criteria. 	
<p>National Curriculum Subject Content:</p>	<p><u>Key stage 1</u> Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment]. When designing and making, pupils should be taught to:</p> <p><u>Design</u></p> <ul style="list-style-type: none"> - design purposeful, functional, appealing products for themselves and other users based on design criteria - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology <p><u>Make</u></p> <ul style="list-style-type: none"> - select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] 		

	<ul style="list-style-type: none"> - select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics <p><u>Evaluate</u></p> <ul style="list-style-type: none"> - explore and evaluate a range of existing products - evaluate their ideas and products against design criteria <p><u>Technical knowledge</u></p> <ul style="list-style-type: none"> - build structures, exploring how they can be made stronger, stiffer and more stable - explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.
Design Knowledge: Structures	<ul style="list-style-type: none"> • Know how to make freestanding structures stronger, stiffer and more stable. • Know and use technical vocabulary relevant to the project.
Design Knowledge: Textiles	<ul style="list-style-type: none"> • Understand how simple 3-D textile products are made, using a template to create two identical shapes. • Understand how to join fabrics using different techniques e.g. running stitch, glue, over stitch, stapling. • Explore different finishing techniques e.g. using painting, stitching, sequins, buttons and ribbons. • Use technical vocabulary relevant to the project.
Knowledge Sequence Structures:	
Intended Knowledge Substantive	<p>Lesson 1 – Explore LC: I can identify a describe a free standing structure</p> <p>Lesson 2 – Evaluate LC: I can evaluate a variety of structures</p> <p>Lesson 3 – Develop Skills LC: I can join using a variety of materials - Know how to make freestanding structures stronger, stiffer and more stable.</p> <p>Lesson 4 – Design LC: I can design a free standing rocket</p> <p>Lesson 5 – Create Final Piece LC: I can make a free standing rocket</p> <p>Lesson 6 – Evaluate LC: I can evaluate my product</p>
Key Vocabulary	<p><u>Free Standing Structures</u> cut, fold, join, fix, structure, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved, metal, wood, plastic, purpose, function, names of shapes.</p>
Assessment Outcomes Structures	<ul style="list-style-type: none"> • Know how to make freestanding structures stronger, stiffer and more stable. • Evaluate their ideas and products against design criteria • Develop my own ideas through a simple plan through drawings and discussions with others. • Select and use tools, skills and techniques, explaining their choices.
Assessment Outcomes Textiles	<ul style="list-style-type: none"> • Evaluate their ideas throughout and their final products against original design criteria • Plan and design a functional and appealing product for a chosen user and purpose. • Use my own ideas and explain to others how I want to make my product • Select and use tools and media to perform practical tasks such as marking out, cutting, joining and finishing.
Significant people/places	<ul style="list-style-type: none"> • Norman Hartnell Designer- Queen’s wedding dress & Coronation dress. Wernher von Braun - German- American rocket engineer. • John Nash- (architect who designed the house into a palace – Buckingham Palace)
Resources	
Examples of work	
Examples Final Piece	