
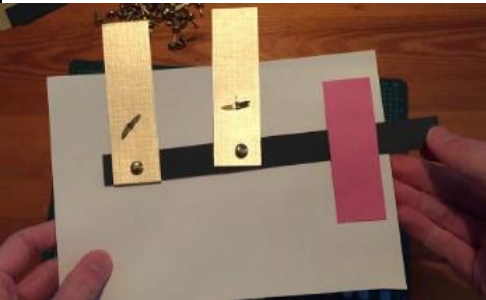
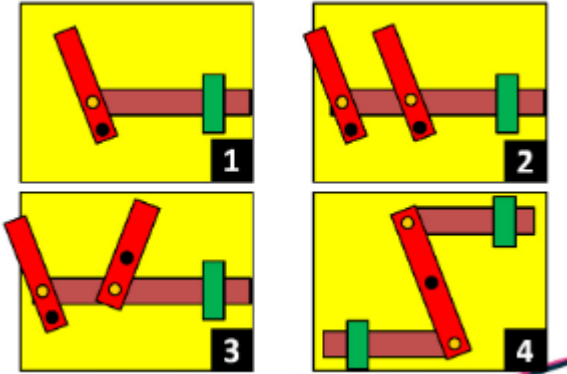

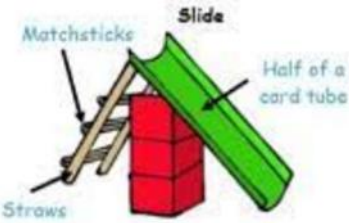






DT Unit of Work Year 2 Autumn - Mechanisms			
Unit	Prior learning (Retrieval)	Future learning	Common Misconceptions
Final piece: Mechanism Sliders and levers Christmas Card 	<ul style="list-style-type: none"> <li>Assembled vehicles with moving wheels using construction kits.</li> <li>Explore moving vehicles through play.</li> <li>Gained some experience of designing, making and evaluating products for a specified user and purpose.</li> <li>Developed some cutting, joining and finishing skills with card.</li> </ul>	<u>Design</u> Generate ideas based on simple design criteria and their own experiences, explaining what they could make. <ul style="list-style-type: none"> <li>Develop, model and communicate their ideas through drawings and mock-ups with card and paper.</li> </ul> <u>Make</u> <ul style="list-style-type: none"> <li>Plan by suggesting what to do next.</li> <li>Select and use tools, explaining their choices, to cut, shape and join paper and card.</li> <li>Use simple finishing techniques suitable for the product they are creating.</li> </ul> <u>Evaluate</u> <ul style="list-style-type: none"> <li>Explore a range of existing books and everyday products that use simple sliders and levers.</li> <li>Evaluate their product by discussing how well it works in relation to the purpose and the user and whether it meets design criteria.</li> </ul>	
<b>National Curriculum Subject Content:</b>	<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: <u>Design</u> <ul style="list-style-type: none"> <li>design purposeful, functional, appealing products for themselves and other users based on design criteria</li> <li>generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> </ul> <u>Make</u> <ul style="list-style-type: none"> <li>select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</li> <li>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul> <u>Evaluate</u> <ul style="list-style-type: none"> <li>explore and evaluate a range of existing products</li> <li>evaluate their ideas and products against design criteria</li> </ul> <u>Technical knowledge</u> <ul style="list-style-type: none"> <li>build structures, exploring how they can be made stronger, stiffer and more stable</li> <li>explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</li> </ul>		
<b>Design Knowledge:</b>	<ul style="list-style-type: none"> <li>Explore and use sliders and levers.</li> <li>Understand that different mechanisms produce different types of movement.</li> <li>Know and use technical vocabulary relevant to the project.</li> </ul>		
Knowledge Sequence:			Key Vocabulary
<b>Intended Knowledge Substantive</b>	<b>Lesson 1 – Evaluate</b> LC: I can evaluate different types of Christmas cards <b>Lesson 2 – Explore</b> LC: I can identify different sliders and levers <b>Lesson 3 – Develop Skills</b> LC: I can create a model lever with a partner <ul style="list-style-type: none"> <li>Children to problem solve</li> </ul> <b>Lesson 4 – Design</b> LC: I can design a Christmas card <b>Lesson 5 – Create Final Piece</b> LC: I can create a final piece <b>Lesson 6 – Evaluate</b> I can evaluate my final piece		<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
<b>Assessment Outcomes</b>	<ul style="list-style-type: none"> <li>Select and use tools, explaining their choices.</li> <li>Understand that different mechanisms produce different types of movement.</li> <li>Explore and evaluate the use of wheels and axles.</li> <li>Generate ideas and make a plan based on simple design criteria</li> </ul>		
<b>Significant people/places</b>	<ul style="list-style-type: none"> <li></li> </ul>		

Resources	<a href="https://www.youtube.com/watch?v=SinLvPGySmQ">https://www.youtube.com/watch?v=SinLvPGySmQ</a> - Levers and Linkages how to? <a href="https://www.youtube.com/watch?v=1kC4uX2BoDw">https://www.youtube.com/watch?v=1kC4uX2BoDw</a> – Levers and Linkages how to?	
Examples of work		
Examples Final Piece		

DT Unit of Work Year 2 Spring- Structures			
Unit Structures	Prior learning (Retrieval)	Future learning	Common Misconceptions
<p>Final piece: Create a Freestanding structure</p> 	<ul style="list-style-type: none"> <li>Experience of using construction kits to build walls, towers and frameworks.</li> <li>Experience of using of basic tools e.g. scissors or hole punches with construction materials.</li> <li>Experience of different methods of joining card and paper.</li> </ul>	<p><u>Design</u></p> <ul style="list-style-type: none"> <li>Generate ideas based on simple design criteria and their own experiences, explaining what they could make.</li> <li>Develop, model and communicate their ideas through talking, mock-ups and drawings.</li> </ul> <p><u>Make</u></p> <ul style="list-style-type: none"> <li>Plan by suggesting what to do next.</li> <li>Select and use tools, skills and techniques, explaining their choices.</li> <li>Select new and reclaimed materials and construction kits to build their structures.</li> <li>Use simple finishing techniques suitable for the structure they are creating.</li> </ul> <p><u>Evaluate</u></p> <ul style="list-style-type: none"> <li>Explore a range of existing freestanding structures in the school and local environment e.g. everyday products and buildings.</li> <li>Evaluate their product by discussing how well it works in relation to the purpose, the user and whether it meets the original design criteria.</li> </ul>	
<p><b>National Curriculum Subject Content:</b></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"> <li>design purposeful, functional, appealing products for themselves and other users based on design criteria</li> <li>generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> </ul> <p><u>Make</u></p> <ul style="list-style-type: none"> <li>select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</li> <li>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul> <p><u>Evaluate</u></p> <ul style="list-style-type: none"> <li>explore and evaluate a range of existing products</li> <li>evaluate their ideas and products against design criteria</li> </ul> <p><u>Technical knowledge</u></p> <ul style="list-style-type: none"> <li>build structures, exploring how they can be made stronger, stiffer and more stable</li> <li>explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</li> </ul>		
<p><b>Design Knowledge:</b></p>	<ul style="list-style-type: none"> <li>Know how to make freestanding structures stronger, stiffer and more stable.</li> <li>Know and use technical vocabulary relevant to the project.</li> </ul>		
Knowledge Sequence:			Key Vocabulary
<p><b>Intended Knowledge Substantive</b></p>	<p><b>Lesson 1 – Explore</b> LC: I can identify, describe and compare the features of the tallest and longest structures in the world.</p> <ul style="list-style-type: none"> <li>Look at a variety of objects e.g. music stand, coat stand, telescope tripod</li> </ul> <p>Q- Why do these objects have to be strong and stable? How are they designed to be strong and stable?</p> <p><b>Lesson 2 – Evaluate –looking at other structures</b> LC: I can understand how to strengthen, stiffen and reinforce more complex structures. Choose a task:</p> <ul style="list-style-type: none"> <li>Make the tallest tower you can using only newspaper and sticky tape. It must support itself without falling over.</li> </ul>		<p><u>Structures</u></p> <p>cut, fold, join, fix, structure, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved, metal, wood, plastic, purpose, function, names of shapes.</p>

	<ul style="list-style-type: none"> <li>- Make the strongest bridge between 2 chairs using only newspaper and sticky tape. It must support the weight of a Mars bar.</li> <li>- Make the strongest table using only newspaper and sticky tape. It must support the weight of a book chosen by the teacher.</li> </ul> <p>Q- What did you learn by doing this investigation? Q- How did you strengthen or reinforce the structure?</p> <p><b>Lesson 3 – Develop Skills</b> LC: I can use my knowledge when making structures</p> <p><b>Lesson 4 – Design</b> LC: I can design a tower -using art straws, pasta or similar material</p> <p><b>Lesson 5 – Create Final Piece</b> LC: I can make a free standing tower</p> <p><b>Lesson 6 – Evaluate</b> LC: I can evaluate my free standing tower</p>	
<b>Assessment Outcomes</b>	<ul style="list-style-type: none"> <li>• Know how to make freestanding structures stronger, stiffer and more stable.</li> <li>• evaluate their product by discussing how well it works in relation to the purpose</li> </ul>	
<b>Significant people/places</b>	<ul style="list-style-type: none"> <li>• Paris Zoological Park by Bernard Tschumi</li> <li>• HASCHER JEHLE Zoo architect</li> <li>• Walter Aubrey Thomas- Liver Building architect- Visit Liverpool</li> </ul>	
<b>Resources</b>	<p>What makes bridges strong? <a href="https://www.youtube.com/watch?v=oVOnRPefcno">https://www.youtube.com/watch?v=oVOnRPefcno</a>          Think like an engineer <a href="https://www.youtube.com/watch?v=RM04n0-QtNo&amp;list=PLQcnqZlFrrTguqBh4CVO3fpjij_2qEvc1">https://www.youtube.com/watch?v=RM04n0-QtNo&amp;list=PLQcnqZlFrrTguqBh4CVO3fpjij_2qEvc1</a>          Straw Towers <a href="https://www.youtube.com/watch?v=VuX_27HvHpU">https://www.youtube.com/watch?v=VuX_27HvHpU</a></p>	
<b>Examples of work</b>		
<b>Examples Final Piece</b>		

DT Unit of Work Year 2 Summer – Food & Textiles			
Unit Structures	Prior learning (Retrieval)	Future learning	Common Misconceptions
Final piece: Food Preparing Fruit and vegetable 	<ul style="list-style-type: none"> <li>Experience of common fruit and vegetables, undertaking sensory activities,(taste and smell).</li> <li>Experience of cutting soft fruit and vegetables using appropriate utensils.</li> </ul>	<u>Design</u> Design appealing products for a particular user based on simple design criteria. <ul style="list-style-type: none"> <li>Generate initial ideas and design criteria through investigating a variety of fruit and vegetables.</li> <li>Communicate these ideas through talk and drawings.</li> </ul> <u>Make</u> <ul style="list-style-type: none"> <li>Use simple utensils and equipment to e.g. peel, cut, slice, squeeze, grate and chop safely.</li> <li>Select from a range of fruit and vegetables according to their characteristics e.g. colour, texture and taste to create a chosen product.</li> </ul> <u>Evaluate</u> <ul style="list-style-type: none"> <li>Taste and evaluate a range of fruit and vegetables to determine the intended user's preferences.</li> <li>Evaluate ideas and finished products against design criteria, including intended user and purpose.</li> </ul>	
Final piece: Textiles (Market Place) Binca design 	<ul style="list-style-type: none"> <li>Explored and used different fabrics.</li> <li>Cut and joined fabrics with simple techniques.</li> <li>Thought about the user and purpose of products.</li> </ul>	<u>Design</u> <ul style="list-style-type: none"> <li>Generate, develop, model and communicate their ideas as appropriate through talking, drawing, templates, mock-ups and ICT</li> <li>Select from and use a range of tools and equipment to perform practical tasks such as marking out, cutting, joining and finishing.</li> <li>Select from and use textiles according to their characteristics.</li> </ul> <u>Make</u> <ul style="list-style-type: none"> <li>Select from and use a range of tools and equipment to perform practical tasks such as marking out, cutting, joining and finishing.</li> <li>Select from and use textiles according to their characteristics.</li> </ul> <u>Evaluate</u> <ul style="list-style-type: none"> <li>Explore and evaluate a range of existing textile products relevant to the project being undertaken.</li> <li>Evaluate their ideas throughout and their final products against original design criteria.</li> <li>Design a functional and appealing product for a chosen user and purpose based on simple design criteria.</li> </ul>	
<b>National Curriculum Subject Content:</b>	<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: <u>Design</u> <ul style="list-style-type: none"> <li>design purposeful, functional, appealing products for themselves and other users based on design criteria</li> <li>generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> </ul> <u>Make</u> <ul style="list-style-type: none"> <li>select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</li> <li>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul> <u>Evaluate</u> <ul style="list-style-type: none"> <li>explore and evaluate a range of existing products</li> <li>evaluate their ideas and products against design criteria</li> </ul> <u>Technical knowledge</u> <ul style="list-style-type: none"> <li>build structures, exploring how they can be made stronger, stiffer and more stable</li> <li>explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</li> </ul>		



	<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: <u>Key stage 1</u> <ul style="list-style-type: none"><li>- use the basic principles of a healthy and varied diet to prepare dishes</li><li>- understand where food comes from.</li></ul>	
Design Knowledge Food:	<ul style="list-style-type: none"><li>• Understand where a range of fruit and vegetables come from e.g. farmed or grown at home.</li><li>• Understand and use basic principles of a healthy and varied diet to prepare dishes.</li><li>• Know and use technical and sensory vocabulary relevant to the project.</li></ul>	
Design Knowledge Textiles:	<ul style="list-style-type: none"><li>• Understand how simple 3-D textile products are made, using a template to create two identical shapes.</li><li>• Understand how to join fabrics using different techniques e.g. running stitch, glue, over stitch, stapling.</li><li>• Explore different finishing techniques e.g. using painting, stitching, sequins, buttons and ribbons.</li><li>• Know and use technical vocabulary relevant to the project.</li></ul>	
Knowledge Sequence:		Key Vocabulary
Intended Knowledge Substantive Food	<p><b>Lesson 1 – Explore</b> LC: I can identify what makes up a balanced diet</p> <ul style="list-style-type: none"><li>- Healthy Eating: An introduction for children aged 5-11 videos</li><li>- Follow on videos discuss different food groups:<ul style="list-style-type: none"><li>- Foods we need to eat less often</li><li>-Starchy Carbohydrates</li><li>-Protein</li><li>-Fruit &amp; Vegetables</li><li>-Dairy</li></ul></li></ul> <p><b>Lesson 2 – Evaluate</b> LC: I can evaluate a variety of fruit/vegetable snacks</p> <ul style="list-style-type: none"><li>- Sort pictures of food</li><li>- discuss choices</li></ul> <p><b>Lesson 3 – Develop Skills</b> LC: I can explore healthy choices through my senses</p> <ul style="list-style-type: none"><li>- Children taste a variety of healthy choices and discuss what they would like in their final product</li><li>- Discuss including a range of foods including treats and the importance of a balanced diet</li></ul> <p><b>Lesson 4 – Design</b> LC: I can designed a healthy snack</p> <p><b>Lesson 5 – Create Final Piece</b> LC: I can make a healthy snack</p> <p><b>Lesson 6 – Evaluate</b> LC: I can evaluate my healthy snack</p>	<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, squeezing, healthy diet, choosing, ingredients, planning, investigating tasting, arranging, popular, design, evaluate, criteria</p>
Assessment Outcomes	<ul style="list-style-type: none"><li>• Use simple utensils and equipment ( including measuring) safely</li><li>• Explore a variety of fruit and vegetables and describe the ingredients I am using.</li><li>• Evaluate ideas and finished products against design criteria including intended user and purpose.</li></ul>	
Significant people/places	<ul style="list-style-type: none"><li>• Clarissa Dickson- British Chef</li></ul>	
Resources	Healthy Eating: An introduction for children aged 5-11 <a href="https://www.youtube.com/watch?v=mMHVEFWNLMc">https://www.youtube.com/watch?v=mMHVEFWNLMc</a>	
Examples of work		
Examples Final Piece		