

**Yearly Overview**

**Subject: DT**

**Year Group: 2**

DT Primary - Project on a page	Autumn 1	Spring 1	Spring 2
Unit of work	<b>Food - Preparing fruit and vegetables</b> <a href="https://drive.google.com/file/d/1CKpePIGwtbylmZ74RVj7bg7DOItoLuWe/view?usp=sharing">https://drive.google.com/file/d/1CKpePIGwtbylmZ74RVj7bg7DOItoLuWe/view?usp=sharing</a>	<b>Structures - Freestanding Structures</b> <a href="https://drive.google.com/file/d/1DbwldGGBbPu-VJC5tx5K8uyfsdC17EpPs/view?usp=sharing">https://drive.google.com/file/d/1DbwldGGBbPu-VJC5tx5K8uyfsdC17EpPs/view?usp=sharing</a>	<b>Mechanisms - Wheels &amp; Axels</b> <a href="https://drive.google.com/file/d/1nFLDfHBr1oVT7f3lxnWKbFMGnpgguqSR/view?usp=sharing">https://drive.google.com/file/d/1nFLDfHBr1oVT7f3lxnWKbFMGnpgguqSR/view?usp=sharing</a>
NC Objectives (Linked to Programme of Study)	<p>The national curriculum for design and technology aims to ensure that all pupils:</p> <ul style="list-style-type: none"> <li>• develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world</li> <li>• build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users</li> <li>• critique, evaluate and test their ideas and products and the work of others</li> <li>• understand and apply the principles of nutrition and learn how to cook.</li> </ul>		
Project title	<b>Healthy Salad</b> Design, make and evaluate a healthy salad (product) for the family (user) for lunch (purpose)	<b>Bridge</b> To design, make and evaluate a bridge (product) to cross the River Thames (user) safety / using suitable materials (purpose.)	<b>Making movable cars</b> Design, make and evaluate a car (product) for the team (user) to use in a class race (purpose)
Prior Knowledge	<ul style="list-style-type: none"> <li>• Experience of common fruit and vegetables, undertaking sensory activities i.e. appearance taste and smell.</li> <li>• Experience of cutting soft fruit and vegetables using appropriate utensils.</li> </ul>	<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 e.g. plastic, card.</li> <li>• Experience of different methods of joining card and paper.</li> </ul>	<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>
Composite knowledge (Inc. Key Questions)	<b>Technical knowledge and understanding</b> <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, including how fruit and vegetables are part of The eat well plate.</li> <li>• Know and use technical and sensory vocabulary relevant to the project.</li> </ul> <p>- Which fruit/vegetables might be the best for our</p>	<b>Technical knowledge and understanding</b> <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> <p>- What are the structures called and what is their purpose?            - How have the parts been joined together?            - How have the structures been made strong</p>	<b>Technical knowledge and understanding</b> <ul style="list-style-type: none"> <li>• Explore and use wheels, axles and axle holders.</li> <li>• Distinguish between fixed and freely moving axles.</li> <li>• Know and use technical vocabulary relevant to the project.</li> </ul> <p>- How do you think the wheels move?            - How do you think the wheels are fixed onto the car?            - Why do you think the product has this number of</p>

	<p>product to match the occasion/purpose? - Why do we cut, grate, peel and slice in this way?</p>	<p>enough? - How have they been made stable?</p>	<p>wheels? - Why do you think the wheels are round?</p>
<p>Key Concepts  (Component / intentional knowledge - what they need to understand)</p>	<p><b>Designing</b></p> <ul style="list-style-type: none"> <li>• Design appealing products for a particular user based on simple design criteria.</li> <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> <p><b>Making</b></p> <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> <p><b>Evaluating</b></p> <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>	<p><b>Designing</b></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><b>Making</b></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><b>Evaluating</b></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>Designing</b></p> <ul style="list-style-type: none"> <li>• Generate initial ideas and simple design criteria through talking and using own experiences.</li> <li>• Develop and communicate ideas through drawings and mock-ups.</li> </ul> <p><b>Making</b></p> <ul style="list-style-type: none"> <li>• Select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing.</li> <li>• Select from and use a range of materials and components such as paper, card, plastic and wood according to their characteristics.</li> </ul> <p><b>Evaluating</b></p> <ul style="list-style-type: none"> <li>• Explore and evaluate a range of products with wheels and axles.</li> <li>• Evaluate their ideas throughout and their products against original criteria.</li> </ul>
<p>Vocabulary</p>	<p>flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients, planning, investigating tasting, arranging, popular, design, evaluate, criteria</p>	<p>structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved</p>	<p>vehicle, wheel, axle, axle holder, chassis, body, cab assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism</p>
<p>Cross-curricular links</p>	<p>PSHE - Health</p>	<p>English - Fairy Tales</p>	