



	Autumn	Spring	Summer
<p>EYFS</p> <p>Lesson 1: Research (existing products) Lesson 2: Explore and Test Lesson 3: Design Lesson 4: Make Lesson 5: Make Lesson 6: Evaluate</p>	<p><b>Cooking- can we make different dishes?</b> Chop and cut fruit; mix to make fruit salad; bake bread; knead and prove bread; explore melting states (cheese); dip breadsticks for wands.</p> <ul style="list-style-type: none"> <li>- To recognise different fruits and vegetables.</li> <li>- To explore different foods using the five senses.</li> <li>- To understand basic food hygiene when preparing food.</li> <li>- To make a fruit salad using cooking techniques such as mixing, cutting, chopping.</li> <li>- To explore the process of melting foods.</li> <li>- To understand the importance of healthy food choices.</li> </ul>		<p><b>Rockets- how will we get to space?</b> Use junk materials; join parts together; create folds/ openings; explore shapes of objects; ensure effectiveness sturdiness; evaluate.</p> <ul style="list-style-type: none"> <li>- To understand the purpose of a rocket and what a rocket needs.</li> <li>- To use different materials to create 'textures'- foil, cotton wool, sandpaper, etc)</li> <li>- To think about shapes and colours when designing a rocket.</li> <li>- To use junk modelling materials to build a rocket.</li> <li>- To test their rocket for effectiveness.</li> <li>- To evaluate and change materials for sturdiness and strength.</li> </ul>
<p>Year 1</p> <p>Lesson 1: Research (existing products) Lesson 2: Explore and Test Lesson 3: Design Lesson 4: Make Lesson 5: Make Lesson 6: Evaluate</p>	<p><b>Mechanical Structures- Can we design a slider mechanism?</b> Understand what a mechanism is, how it can be used to make a vehicle move, depict book characters</p> <ul style="list-style-type: none"> <li>- To understand what a slider is and how it moves (examples &amp; looking at book characters to use).</li> <li>- To explore different materials that can be used to build a simple slider.</li> <li>- To plan and design a simple slider mechanism.</li> <li>- To build a slider mechanism using different materials.</li> <li>- To test a slider mechanism and suggest improvements.</li> <li>- To evaluate and discuss what slider mechanism they have created.</li> </ul>	<p><b>Cooking and Nutrition- How smooth is a smoothie?</b> Identify where fruit/vegetables are grown, practice food preparation skills, apply to smoothie recipe.</p> <ul style="list-style-type: none"> <li>- To understand what a smoothie is and what the benefits of a smoothie are.</li> <li>- Explore different textures of different fruits and vegetables (smooth, rough, chunky, etc).</li> <li>- To learn how to blend ingredients.</li> <li>- To practice basic food prep skills- washing, peeling, etc.</li> <li>- To choose fruits and vegetables and write a simple smoothie recipe.</li> <li>- To make a simple smoothie following my own design.</li> <li>- To innovate and change smoothie based off likes and dislikes.</li> <li>- Evaluate smoothies, describing texture and flavour.</li> </ul>	<p><b>Textiles- what story can your puppet tell?</b> Use felt and sewing techniques; create animal puppets.</p> <ul style="list-style-type: none"> <li>- To understand what a puppet is and how stories can be told through puppets.</li> <li>- To practice basic joining techniques (sewing, gluing, taping).</li> <li>- To design a puppet based on a story.</li> <li>- To begin creating their puppet.</li> <li>- To recognise how to make their puppet perform different movements.</li> <li>- To practice performing their story using their puppet.</li> </ul>



<p><b>Year 2</b></p> <p>Lesson 1: Research (existing products) Lesson 2: Explore and Test Lesson 3: Design Lesson 4: Make Lesson 5: Make Lesson 6: Evaluate</p>	<p><b>Wheel, Axis and Chassis- Can we make a moving car?</b></p> <p>Understand and use wheels and axles, recognise which materials are appropriate.</p> <ul style="list-style-type: none"> <li>- To understand and recognise how different vehicles move.</li> <li>- To explore and select materials to build a moving car to suit its purpose.</li> <li>- To plan and sketch a design for a moving car.</li> <li>- To build a moving car using the materials I have selected.</li> <li>- To test and evaluate how well my product works.</li> <li>- To improve the car based on evaluations.</li> </ul>	<p><b>Building a Structure- Can we build Baby Bear's chair?</b></p> <p>Plan a design criteria for a structure to be strong and sturdy, use joins and folds, test out strength of different structures.</p> <ul style="list-style-type: none"> <li>- To identify suitable materials for building a small chair, comparing to familiar or similar products.</li> <li>- To decide what Baby Bear would need in a chair (size, strength, comfort).</li> <li>- To create a simple design for Baby Bear's chair.</li> <li>- To begin building the chair based on a simple design, using suitable tools for cutting, shaping and joining.</li> <li>- To complete the chair by adding features of comfort and decoration.</li> <li>- To test the finished model and evaluate based on original design criteria.</li> </ul>	<p><b>Wraps- is it a food group?</b></p> <p>Recognise different food groups – use all; use appropriate equipment; learn and use chopping, slicing, grating, spreading techniques.</p> <ul style="list-style-type: none"> <li>- To identify the main food groups and understand the importance of a balanced diet.</li> <li>- To explore different types of wraps and what fillings could be chosen.</li> <li>- To plan their wrap by choosing ingredients based on taste, texture and nutrition.</li> <li>- To prepare their ingredients, recognising the importance of food hygiene and safe food handling.</li> <li>- To evaluate their wraps and the ingredients they chose.</li> <li>- To reflect on what they have learnt about food groups and healthy eating.</li> </ul>
<p><b>Year 3</b></p> <p>Lesson 1: Research (existing products) Lesson 2: Explore and Test Lesson 3: Design Lesson 4: Make Lesson 5: Make Lesson 6: Evaluate</p>	<p><b>Levers and Linkages- Can we make a moving part character?</b></p> <p>Use parts to create a desired motion, understand and use levers and linkages to connect parts together.</p> <ul style="list-style-type: none"> <li>- To understand the basic function of a skeleton and how bones and joints allow movement.</li> <li>- To understand how levers and linkages create movement in mechanisms.</li> <li>- To plan and design a character with moving parts.</li> <li>- To construct their design using levers and linkages.</li> <li>- To assemble and finish my character.</li> <li>- To evaluate the effectiveness of the moving-part character.</li> </ul>	<p><b>Shell Structure: Can we organise our desk space?</b></p> <p>Understand what a desk tidy is and the purpose of a desk tidy.</p> <ul style="list-style-type: none"> <li>- To recognise what a desk tidy is and why it is purposeful.</li> <li>- To explore what features a desk tidy needs, what shape/size/strength it needs to be.</li> <li>- To create a simple design for a desk tidy.</li> <li>- Begin to build a desk tidy, ensuring it has sturdy structure and is purposeful.</li> <li>- Add features to your desk tidy for aesthetics.</li> <li>- Test your desk tidy for effectiveness and stability.</li> </ul>	<p><b>Bread of the Dead &amp; Salsa- Did Spanish food travel over continents?</b></p> <p>Measure mix, knead ingredients; prove bread; chop and mix range of vegetables for accompaniment.</p> <ul style="list-style-type: none"> <li>- To discuss the origin of Spanish food and its journey across continents.</li> <li>- To explore Spanish bread and salsa (key ingredients in a traditional recipe).</li> <li>- To design a recipe for making bread.</li> <li>- To understand how to prepare the salsa, practicing knife skills and safe food prep techniques.</li> <li>- To follow a recipe and bake bread.</li> <li>- To prepare the salsa, pairing with the bread and evaluating.</li> </ul>



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<p><b>Year 5</b></p> <p>Lesson 1: Research (existing products) Lesson 2: Explore and Test Lesson 3: Design Lesson 4: Make Lesson 5: Make Lesson 6: Evaluate</p>	<p><b>Cottage Pie- Why is a cottage pie named so?</b></p> <p>Use and understand basic baking techniques- chopping, peeling, seasoning, frying mashing, grating. Recognise when meat is cooked through.</p> <ul style="list-style-type: none"> <li>- To understand the context and origin of a cottage pie.</li> <li>- To identify traditional ingredients in a cottage pie and explore potential variations.</li> <li>- To plan a cottage pie recipe.</li> <li>- To prepare ingredients for the cottage pie- developing basic cooking skills.</li> <li>- To assemble and bake the cottage pie following a planned recipe.</li> <li>- To taste and evaluate a cottage pie.</li> </ul>	<p><b>Cams- Can we make a Victorian pulley toy?</b></p> <p>Create a wooden shell structure to create a Victorian inspired toy, that uses a cams movement.</p> <ul style="list-style-type: none"> <li>- Explore a variety of Victorian toys, define what a cams movement is and how this can be used in a toy.</li> <li>- Explore building a shell structure and how to include a cams movement in this.</li> <li>- Design a Victorian toy based on their own ideas.</li> <li>- Begin to construct the shell structure for your Victorian toy.</li> <li>- Add the cams movement and any additional enhancements to your toy.</li> <li>- Test and evaluate your toy based on its purpose and effectiveness.</li> </ul>	<p><b>Come to the Quayside!- Can we be inspired by the Tyneside bridges?</b></p> <p>Create replicas of framed triangular structures; make beamed bridges.</p> <ul style="list-style-type: none"> <li>- To explore the Tyneside bridges, their history and their impact on the local area.</li> <li>- To explore the materials used in real bridges and discuss their properties.</li> <li>- To plan and design a 'Tyneside' inspired bridge.</li> <li>- To build the basic structure of the bridge focusing on strength and stability.</li> <li>- To add additional support to their bridge for structural and aesthetic enhancement.</li> <li>- To test and evaluate the effectiveness of their model.</li> </ul>
<p><b>Year 6</b></p>	<p><b>Bean Stew and Tortillas- Can we make Mayan food?</b></p>	<p><b>The Hoppings- Can we design a fairground?</b></p>	<p><b>Lanterns- Can we create a lantern using a microcontroller?</b></p>



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