



# Scheme of Learning for Design Technology



Sheep Dip Lane  
Academy



<b>Phase</b>	KS2 Year 3 and 4 Cycle B
<b>Strand</b>	<b>Sustainability, Impact on the world</b>
<b>Leader</b>	F Parish Principal G Matthews – Design Technology

• DESIGN TECHNOLOGY – Year 4

<b>Main Strand/Concepts</b>	<b>Sustainability, Impact on our world– Design Technology will link to other subjects within this context, however where this is not appropriate it will be taught discreetly.</b>							
<b>Prior Learning Links</b>	<p><i>In Key Stage 1 key Concepts taught are:</i></p> <ul style="list-style-type: none"> <li>• Vegetables contain vitamins and minerals</li> <li>• Processed food is food that has been treated in some way to preserve or change it</li> <li>• Many processed foods contain additives or high quantities of salt or sugar which is unhealthy</li> </ul>							
<b>Main enquiry question/s</b>	<b>What's really in your food?</b>							
<b>Programme of Study NC Requirements</b>	<u>National Curriculum</u>	<table border="1"> <thead> <tr> <th colspan="2" data-bbox="1783 595 2190 595">At the end of this block, pupils will ...</th> </tr> <tr> <th data-bbox="1783 595 1977 595">Know:</th> <th data-bbox="1977 595 2190 595">Be able to:</th> </tr> </thead> <tbody> <tr> <td data-bbox="1783 651 1977 722">Processed foods have many added ingredients</td> <td data-bbox="1977 651 2190 754">           Make, roll and shape bread dough             Make a soup         </td> </tr> </tbody> </table>	At the end of this block, pupils will ...		Know:	Be able to:	Processed foods have many added ingredients	Make, roll and shape bread dough  Make a soup
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Processed foods have many added ingredients	Make, roll and shape bread dough  Make a soup							
	<p><b>Cooking and nutrition</b></p> <p>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.</p> <p>Pupils should be taught to:</p> <p><b>Key stage 2</b></p> <ul style="list-style-type: none"> <li>• understand and apply the principles of a healthy and varied diet</li> <li>• prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</li> <li>• understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed</li> </ul>							
<b>Prior Learning for Concept 1</b>	<ul style="list-style-type: none"> <li>• . Ultra-processed food is less healthy than fresh food Vitamins, fibre and protein are nutrients the body needs and can be found in a range of fresh food.</li> <li>• Healthy alternatives to processed food can be created from fresh ingredients.</li> </ul>							
<b>Learning Objective</b>								

<p>1<sup>st</sup> Concept  <b>Research:</b>  <b>Lesson 1 – where does pizza come from?</b>  <b>Lesson 2 - what's in a processed pizza</b></p>	<p><b><u>DT project: To make a home made pizza</u></b></p> <ul style="list-style-type: none"> <li>To understand what's in processed food.</li> <li>To understand the origin of Pizza</li> </ul>	
<p><b>Subject Specific Vocabulary</b></p>	<p>Core Knowledge – what do we want the children to know?</p>	<p><b>Suggested learning activities – What key experiences?</b></p>
<p><b>Tier 2 -</b>  Pizza  Food  Ingredients  Bread  Dough</p> <p><b>Tier 3 –</b>  Nutrients  Processed  Gluten  Knead</p>	<ul style="list-style-type: none"> <li>Compare the ingredients used in mass-produced pizzas with those used in homemade pizzas - how does this compare from one product to another?</li> <li>Identify the nutrients present in flour, cheese and tomatoes: carbohydrates, vitamins, protein and calcium</li> <li>Know where pizza originates from and how it is traditionally made.</li> </ul>	<ul style="list-style-type: none"> <li>Teach the children the key vocabulary from the list. Ensure children know what these mean before starting to develop knowledge of processed foods.</li> <li>Discuss processed food – what is it – can the children name any processed food. Explore the different between processed food and fresh food.</li> <li>Look at different processed pizza boxes – explore the ingredients – what is high? What is low – Talking point – Are processed pizzas providing us with healthy nutrients? Which nutrients are present in the ingredients for making a pizza? (Links to understanding different food groups)</li> <li>Shape the children some of the ingredients found in processed pizza – weigh out the amount of salt to show children how much is in a processed pizza.</li> <li>Discuss with the children that pizza originates from Italy – discuss how pizzas are traditionally cooked - in a wood fired oven a flat base with cheese and tomato and other toppings for flavour.</li> <li>Gather data as a class what the favourite topping in your class?</li> </ul>
<p>Assessment questions</p>	<ul style="list-style-type: none"> <li>What is gluten?</li> <li>What is dough?</li> <li>What does mass produced mean?</li> <li>What ingredients are used to make processed pizza?</li> <li>How are pizza traditionally made?</li> <li>Where do pizzas originate from?</li> </ul>	<p>Link to Video: <a href="https://vimeo.com/682845413/809a6c5ed2">https://vimeo.com/682845413/809a6c5ed2</a></p> <p><a href="http://kiddle.co">Pizza Facts for Kids (kiddle.co)</a> – research on how pizza is made and where it is made.</p> <p><a href="https://www.youtube.com/watch?v=NN_xjwniMLM">https://www.youtube.com/watch?v=NN_xjwniMLM</a> – how to make pizza video</p>
<p><b>Learning Objective</b></p>	<p><b>Pre-Learning Expectations – concept 2</b></p> <ul style="list-style-type: none"> <li>Ultra-processed food is less healthy than fresh food Vitamins, fibre and protein are nutrients the body needs and can be found in a range of fresh food.</li> <li>Healthy alternatives to processed food can be created from fresh ingredients.</li> </ul>	
<p>2<sup>nd</sup> Concept  <b>Design and step by step method</b></p>	<p><b><u>DT project: To make a home made pizza</u></b></p> <ul style="list-style-type: none"> <li>To design my home made pizza.</li> </ul>	

	<ul style="list-style-type: none"> <li><u>To know the step by step process to make my homemade pizza.</u></li> </ul>	
Subject Specific Vocabulary	Core Knowledge - What do we want the children to know?	Suggested learning activities – What key experiences?
<b>Tier 2 -</b> Pizza Food Ingredients Bread Dough <b>Tier 3 –</b> Nutrients Processed Gluten Knead  ferment	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>Children to design their own home made pizza - what is their favourite toppings?</li> <li>Discuss that adding more toppings will make the base soggy – therefore don't add too many.</li> <li>Discuss with the children their options for toppings.</li> <li>Explain the process for making the dough.</li> <li>Children to write their step by step method for the process needed to make the home made pizza.</li> </ul>
Assessment questions	<ul style="list-style-type: none"> <li>How do you make the dough?</li> <li>What ingredients do you need?</li> <li>What is the method for making the dough?</li> <li>What nutrients are you adding into your home made pizza?</li> </ul>	Resources: Workbooks 'video for how to make a pizza – use the CUSP video if needed.  Link to Video: <a href="https://vimeo.com/682845413/809a6c5ed2">https://vimeo.com/682845413/809a6c5ed2</a>
	<b>Pre Learning Expectations Concept 3</b> <ul style="list-style-type: none"> <li>Ultra-processed food is less healthy than fresh food Vitamins, fibre and protein are nutrients the body needs and can be found in a range of fresh food.</li> <li>Healthy alternatives to processed food can be created from fresh ingredients.</li> </ul>	
3rd Concept Make and Evaluate  X 1 lesson make X 1 lesson evaluate	<b><u>DT project: To make a home made pizza.</u></b> <u>To make my home made pizza.</u> <u>To evaluate my home made pizza.</u>	
Subject Specific Vocabulary	Core Knowledge - What do we want the children to know?	Suggested learning activities – What key experiences?
<b>Tier 2 -</b> Pizza Food Ingredients	<ul style="list-style-type: none"> <li>Make a simple yeastfree dough and use the techniques of kneading, rolling and stretching to form the dough - Can copy a</li> </ul>	<ul style="list-style-type: none"> <li>Explain how to make a yoghurt-based dough. Teach pupils how to knead the dough, pointing out that manipulating the dough helps to develop the gluten in the flour. The gluten becomes more elastic and this improves the texture of the dough once it is cooked.</li> </ul>

<p>Bread Dough</p> <p><b>Tier 3 –</b> Nutrients Processed Gluten Knead ferment</p>	<p>modelled process or technique such as kneading, rolling and stretching Can define the terms:</p> <ul style="list-style-type: none"> <li>• kneading</li> <li>• gluten</li> <li>• processed</li> <li>• ingredients</li> <li>• bread</li> </ul> <ul style="list-style-type: none"> <li>• Explain what gluten is and how it affects the texture of dough</li> <li>• Explore traditional pizza topping ingredients</li> <li>• Evaluate outcomes</li> <li>• Can suggest ways in which a recipe could be adapted or improved</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the process of making a home made pizza using the method in CUSP.</li> <li>• Show pupils how to roll and stretch the dough to the required shape and thickness before placing on a floured tray. Teachers may wish to provide a range of toppings for pupils to select from. However, explain to pupils that as vegetables cook, they release water and if too many toppings are added, there is a risk that the base will become soggy during cooking. Once the pizzas are cooked, encourage pupils to taste and evaluate, making notes in their portfolios of their preferences and the new skills and vocabulary they have learnt.</li> <li>• ORACY: To present your home made pizza to the class discussing the process the ingredients and why your product should be bought over processed varieties. (Parents could work with their own child and taste their own child's pizza in a parent workshop. (Children can present to their parent)</li> <li>• Use task 2 from CUSP to evaluate you pizza.</li> </ul>
<p>Assessment questions</p>	<ul style="list-style-type: none"> <li>• What is kneading?</li> <li>• How can you rectify the mistake of adding too much water to the dough?</li> <li>• Why is it important to knead and stretch the dough?</li> <li>• How can you make sure the pizza dough doesn't go soggy when cooking?</li> </ul>	<p>Resources:</p> <p>Ingredients needed to create a home made pizza – see CUSP</p> <p>Recording sheets</p> <p>Camera</p>