



## Portfields Primary School Medium Term Plan



Year Group – 5

Subject - **Design and Technology**

Strand – **Food**

Topic – **What Could be Healthier?**

Term - **Summer 1**

National Curriculum	Key Questions		Substantive Knowledge	Key Vocabulary	Real-Life Links
<p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.</p> <p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.</p> <p>Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.</p> <p>Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.</p> <p>Investigate and analyse a range of existing products.</p> <p>Understand how key events and individuals in design and technology have helped shape the world.</p> <p>Understand and apply the principles of a healthy and varied diet.</p> <p>Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.</p> <p>Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p>	Do you like spaghetti bolognese? What do you like about it? Which ingredients do you like in your bolognese? Do we all like the same ingredients in our bolognese? What are your opinions of the cattle farm? Do you think all cattle farms are like the example on the video? What is different about these two bolognese sauces? Why? How could you improve this bolognese recipe? What have you done to make your recipe tastier? What have you done to make your recipe healthier? How are you going to prepare your ingredients? How are you going to cook your ingredients? Do you like the taste of your bolognese sauce? What would you do differently next time?		Understand that the ingredients used for a dish can vary due to preference.	Beef Boil Chop Ethical Fry Ingredients Originate Peel Recipe RSPCA Sauce Vegetarian	RSPCA  Ingredients and nutritional values on food packaging.  NHS Eatwell Guide
	Technical Questions		Understand the importance of publishing the ingredients and nutritional values on food packaging.		
	Where did bolognese originate from? <i>Italy</i>	What do the RSPCA believe animals should be protected from? <ul style="list-style-type: none"><li>• <i>hunger and thirst</i></li><li>• <i>discomfort</i></li><li>• <i>pain, injury and disease</i></li><li>• <i>not being able to behave normally</i></li><li>• <i>fear and distress</i></li></ul>			
	Does bolognese contain meat? <i>In Italy, most Bolognese sauces are vegetarian. If meat is added, it is usually beef which comes from cows.</i>		Understand that the 'Eatwell Guide' shows the proportions of a balanced diet.	Technical Vocabulary	Inventors and Makers
	What ingredients are typically in bolognese? <i>Tomatoes, onion, celery, tomato puree, carrots, red wine vinegar, tinned tomatoes, parmesan cheese, bacon.</i>	What is RDI (recommended daily intake)? <i>The amounts of each nutrient that should be consumed in one day. The amount of each nutrient in one portion of the food product compared to the RDI is often shown on food labels as a colour-coded percentage.</i>	Disciplinary Knowledge	Bolognese Bridge and claw Cattle farming Eatwell guide Nutritional value RDI	
	Do all people eat meat? <i>No. Vegetarians, vegans or people with a religious background (such as Hinduism) choose not to eat beef. Others are okay with eating beef as long as the way the meat is sourced is ethical.</i>	How are ingredients arranged on a food label? <i>Listed by quantity with the main ingredient first.</i>	Recognise ingredients being used in a variety of forms (raw, whole, diced, peeled).		
	What does ethical mean? <i>Something that is right in the moral sense - truthful, fair, and honest.</i>	What is the Eatwell Guide? <i>A guide to show you how much of what you eat should come from each food group.</i>	Analyse and compare the ingredients and nutritional values of supermarket bolognese sauces.		
	What is the RSPCA? <i>The RSPCA (Royal Society for the Prevention of Cruelty to Animals) were the first charity to introduce laws to protect animals. They work hard to ensure that all animals can live free from pain and suffering.</i>	What is the bridge and claw method? <i>A way of cutting food that allows the food to be held steady while fingers are kept away from the blade of the knife. Bridge = to cut food in half Claw = to cut food into small pieces</i>	Adapt a given recipe using the 'Eatwell Guide' to improve nutritional value to meet the target audience's needs.		
			Create a written recipe, including modified ingredients, quantities and a method.		
			Use an online tool to create a personalised nutritional label.		
			Peel, chop, boil and fry ingredients with increasing independence.		

Lesson 1			
Flashback Four		Learning Objectives	Star Knowledge
	<b>Last Topic</b> Draw these bridges on your whiteboard in order from weakest to strongest: truss, arch, beam <i>beam, arch, truss</i>	<b>Learning Objective</b> LO to understand the ethical implications of cattle farming.  <b>Success Criteria</b> I can describe the ingredients in a bolognese sauce. I understand that people choose to not eat meat for a variety of reasons. I can explain the RSPCA's role in animal farming.	Vegetarians, vegans or people with a religious background (such as Hinduism) choose not to eat beef. Others are okay with eating beef as long as the way the meat is sourced is ethical.  The RSPCA introduced protection laws to monitor the ethics of beef farming.
<b>Last Year</b> Name a toy that uses stored energy. <i>e.g. wind-up toy, pull-back toy (e.g. slingshot car), toy with a spring</i>	<b>Art</b> Name a warm tertiary colour. <i>Red-orange, yellow-orange, yellow-green</i>		

Lesson 2			
Flashback Four		Learning Objectives	Star Knowledge
<b>Last Lesson</b> What are the 5 things that the RSPCA believe animals should be protected from? 1. <i>Hunger and thirst</i> 2. <i>Discomfort</i> 3. <i>Pain, injury and disease</i> 4. <i>Inability to behave normally</i> 5. <i>Fear and distress</i>	<b>Last Topic</b> What is this piece of equipment called and how it used? <i>A set square that is used for measuring and marking lengths and 45° and 90° angles.</i>	<b>Learning Objective</b> LO to adapt a recipe using nutritional values.  <b>Success Criteria</b> I understand why ingredients and nutritional values are published on food packaging. I can use the Eatwell Guide to create a balanced meal. I know how a recipe can be adapted to make it healthier. I know that the nutritional value of a recipe can change if you remove, substitute or add additional ingredients.	Ingredients and nutritional values are published on food packaging so people can make healthy choices as part of a balanced diet.
<b>Last Year</b> How are exploded diagrams useful? <i>They show how a product can be assembled.</i>	<b>Art</b> What colours might an artist use to create a calm atmosphere or mood? <i>Blues, greens or purples.</i>		

Lesson 3			
Flashback Four		Learning Objectives	Star Knowledge
<b>Last Lesson</b> Why are ingredients and nutritional values published on food packaging? <i>So people can make healthy choices as part of a balanced diet.</i>	<b>Last Topic</b> What is this piece of equipment called and which parts can you hold safely? <i>This is a glue gun. You can hold the handle and the trigger as they do not heat up.</i>	<b>Learning Objective</b> LO to make a vegetarian bolognese sauce.  <b>Success Criteria</b> I can prepare ingredients by peeling and chopping. I can use the bridge and claw method to cut food safely. I can cook ingredients by boiling and frying.	Peel, chop, boil and fry ingredients with increasing independence.
<b>Last Year</b> What mistake has been made? <i>The orientation of the net has not been considered so the design will not match up when the 3D shape is made.</i>	<b>Art</b> What painting technique might we use to paint clouds? <i>Smearing</i>		