

# ACET Junior Academies

Scheme of Work for Design Technology

Y3 Food - Healthy and varied diet



**About this unit:** In this unit pupils will learn about the principles of a healthy and varied diet, linking back to food that was gathered and eaten during the Stone Age. They will investigate and evaluate a range of healthy eating products, considering taste, appearance, texture and smell. Pupils will learn to use a range of equipment and utensils to prepare ingredients and will follow a simple recipe to make a healthy eating product that combines foods collected by Hunter Gatherers. Children will design a healthy eating product for an intended user and purpose. They will apply their learning from the unit to make their product and will evaluate their completed products, judging the extent to which they have met the original design criteria. Final piece ideas: healthy fruit desserts e.g. berry crumble (Link History, Stone Age)

## Unit structure

1. Investigate and Evaluate: What was food like in the Stone Age?
2. Focused Tasks: How are ingredients prepared and combined?
3. Designing: What could I make and how could I make it?
4. Making, Finishing and Evaluating: Can I make the product I designed?

## Links to previous and future National Curriculum units

- KS1 - Food - Preparing fruit and vegetables
- UKS2 - Food - Celebrating culture and seasonality

## 1: Investigate and Evaluate: What was food like in the Stone Age?

Links to previous learning	Knowledge	Skills, Concepts and Vocabulary:	Assessment criteria:	Curricular links:
<p>Pupils will know some ways to prepare ingredients safely and hygienically. They will have some basic knowledge and understanding about healthy eating and <i>The eatwell plate</i>. Pupils will have used some equipment and utensils and prepared and combined ingredients to make a product.</p>	<p><b>Knowledge:</b>  <b>Substantive knowledge:</b>  <i>(What students should know)</i>                      That foods can be grouped according to the Eatwell plate.                      The sensory properties of a range of food and ingredients                      Where different foods and ingredients are grown reared or caught</p> <p><b>Second order concepts:</b>  <i>(What students should understand)</i>                      Evaluation                      User                      Purpose                      Properties</p>	<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>• Begin to understand that food comes from the UK and wider world</li> <li>• Begin to understand how a healthy diet is made up from a variety and balance of food and drink as depicted in The Eatwell Plate</li> <li>• Know that food and drink provide energy for the body.</li> <li>• Evaluate a range of products in terms of taste, smell, texture and appearance.</li> </ul> <p><b>Key Vocabulary/concepts:</b>  <a href="https://20353.stem.org.uk/Nuffield%20Glossary2/index.html">https://20353.stem.org.uk/Nuffield%20Glossary2/index.html</a></p> <p>Name of products and ingredients, texture, taste, sweet, sour, hot, spicy, smell, appearance, preference, greasy, cook, moist, fresh, savoury, grown, reared, caught, frozen, tinned, processed, seasonal, harvested, healthy/varied diet, evaluate, purpose, user</p>	<p><b>Can your children:</b>                      Evaluate a range of products in terms of their taste, smell, texture and appearance using appropriate vocabulary?                      Understand that food is reared, caught or grown in the UK and the wider world?                      Know what makes up a healthy diet?</p>	<p><b>Horizontal:</b>                      Science - Plants, nutrition                      PSHE - Healthy living                      Spoken Language - Ask relevant questions to extend knowledge and understanding. Develop technical and sensory vocabulary.                      History - Stone Age diet</p> <p><b>Vertical:</b></p>

Suggested activities:	Resources:	Useful links:
<p>Pupils could investigate the diet of Stone Age people. Link to the principles of a varied and healthy diet using <i>The eatwell plate</i> e.g. <i>Which food groups do they belong to? E.g. (meat, fish, berries, fruit, grains, nuts, honey)</i></p> <p>Carry out sensory evaluations on a selection of stone age foods e.g. berries, apples, honey, nuts, grains. Record the results in a table. Use appropriate words to describe the taste, smell, texture and appearance and encourage pupils to consider how much the sensory characteristics affect their liking for the food.</p> <p>Look at shop bought products which consist of the above e.g. granola, cereal bars, snack bars, fruit crumbles. <i>What ingredients are in the products? How have ingredients been prepared? Find out how the ingredients used in the products are grown and harvested, reared, caught and processed e.g. Where and when are the ingredients grown/reared? How and why are they processed? How was this different to The Stone Age?</i></p>	<p>Range of relevant example foods to taste and evaluate</p>	<p><a href="https://www.gov.uk/government/publications/the-eatwell-guide">https://www.gov.uk/government/publications/the-eatwell-guide</a></p> <p><a href="https://www.bbc.co.uk/bitesize/topics/zg94jxs/resources/1">https://www.bbc.co.uk/bitesize/topics/zg94jxs/resources/1</a></p> <p><a href="https://www.bbc.co.uk/bitesize/clips/ztr3cdm">https://www.bbc.co.uk/bitesize/clips/ztr3cdm</a></p> <p><a href="http://www.ancientcraft.co.uk/Archaeology/stone-age/stoneage_food.html">http://www.ancientcraft.co.uk/Archaeology/stone-age/stoneage_food.html</a></p> <p><a href="http://mrjennings.co.uk/teacher/DT/D&amp;T%20Lower%20KS2%20project%20sheets.pdf">http://mrjennings.co.uk/teacher/DT/D&amp;T%20Lower%20KS2%20project%20sheets.pdf</a></p>

## 2: Focused Tasks: How can ingredients be prepared and combined?

Links to previous learning	Knowledge	Skills, Concepts and Vocabulary:	Assessment criteria:	Curricular links:
<p>Pupils will have evaluated a range of products in terms of their taste, smell, texture and appearance. They will understand that food products are made for an intended user and will be able to talk about the needs and wants of the user.</p> <p>Pupils will know that food is reared, caught or grown and will know some ways that food is processed.</p>	<p><b>Substantive knowledge:</b> (<i>What students should know</i>)</p> <p>That products are made by preparing and mixing ingredients.</p> <p>Know how to prepare food and ingredients to make products.</p> <p>Know about the ingredients in the products, and whether they have been grown, reared or caught.</p> <p>Know where the ingredients for their product come from.</p>	<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>• Begin to understand that food comes from the UK and wider world</li> <li>• Begin to prepare and cook dishes, safely and hygienically.</li> <li>• Use some of the following techniques to prepare food with increasing confidence: peeling, chopping, grating, slicing, kneading and mixing</li> <li>• that food ingredients can be fresh, pre-cooked and processed</li> </ul>	<p><b>Can your children:</b></p> <p>Use a range of tools, utensils and techniques to prepare ingredients?</p> <p>Understand and follow safety and food hygiene procedures?</p> <p>Know about the ingredients to be used in the product?</p>	<p><b>Horizontal:</b></p> <p>Maths - Mass kg/g</p> <p>Science - plants; nutrition</p> <p>Geography - where ingredients come from</p> <p><b>Vertical:</b></p>

		<p><b>Key Vocabulary/concepts:</b>  Names of equipment, utensils and ingredients  Hygiene, hygienic, edible, grown, reared, caught, harvested, slice, chop, grate, mix, knead, bake, bridge and claw,</p>		
<b>Suggested activities:</b>		<b>Resources:</b>	<b>Useful links:</b>	
<p>Children could look at how food and ingredients were prepared during the Stone Age. e.g. how they ground down grains etc and techniques to prepare ingredients; <i>How are these different to today? How is this different to preparing food hygienically today?</i>  Use an existing recipe to follow to make an example of the intended end product e.g. simple cereal bar or apple crumble. Demonstrate relevant techniques for children, e.g. the bridge and claw technique, grating, peeling, chopping, slicing, mixing, spreading, kneading and baking.  Pupils work in groups to follow the recipe to practise the skills taught. Discuss basic food hygiene practices when handling food including the importance of following instructions to control risk e.g. <i>What should we do before we work with food? Why is following instructions important?</i></p>		<p>Suitable equipment and utensils such as knives, peelers, graters, chopping boards, weighing scales, measuring jugs, bowls, baking trays, spoons,</p>	<p><a href="https://www.warburtons.co.uk/downloads/teaching-resources/cooking-in-a-primary-school-classroom/Guide%20-%20How%20to%20teach%20food%20skills.pdf">https://www.warburtons.co.uk/downloads/teaching-resources/cooking-in-a-primary-school-classroom/Guide%20-%20How%20to%20teach%20food%20skills.pdf</a>   <a href="http://www.ancientcraft.co.uk/Archaeology/stone-age/stoneage_food.html">http://www.ancientcraft.co.uk/Archaeology/stone-age/stoneage_food.html</a>   <a href="http://mrjennings.co.uk/teacher/DT/D&amp;T%20Lower%20KS2%20project%20sheets.pdf">http://mrjennings.co.uk/teacher/DT/D&amp;T%20Lower%20KS2%20project%20sheets.pdf</a></p>	

### 3: Designing : What could I make.

<b>Links to previous learning</b>	<b>Knowledge</b>	<b>Skills, Concepts and Vocabulary:</b>	<b>Assessment criteria:</b>	<b>Curricular links:</b>
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<p>Pupils will have experienced using a range of techniques to prepare ingredients. Pupils will be able to talk about how and why different foods are processed.</p>	<p><b>Substantive knowledge:</b> <i>(What students should know)</i> The sensory qualities of a range of food and ingredients. That food and ingredients can be selected according to their sensory qualities. How to select ingredients to meet design criteria. The order of which the product will be made.</p>	<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>• Begin to describe the purpose of their product</li> <li>• Consider the needs and wants the user</li> <li>• Develop their own design criteria and use to inform their ideas</li> <li>• Through discussion, generate realistic ideas for an item, considering its purpose and the needs of the user/s</li> <li>• Communicate ideas through producing drawings with labels</li> <li>• Understand that recipes can be changed by adding or taking away ingredients</li> </ul> <p><b>Key Vocabulary/concepts:</b> Planning, design criteria, purpose, user, annotated sketch, recipe</p>	<p><b>Can your children:</b> Develop ideas about the product they are going to make based on the needs of the user. Develop their own set of design criteria and use to inform their ideas. Create annotated sketches to communicate ideas. Plan the main stages of a recipe.</p>	<p><b>Horizontal:</b> Maths kg/g Are and design - use drawing and sketching skills to develop and communicate ideas. Spoken language - participate in discussion with adults and peers to develop and communicate ideas.</p> <p><b>Vertical:</b></p>
<p><b>Suggested activities:</b></p>		<p><b>Resources:</b></p>	<p><b>Useful links:</b></p>	
<p>Discuss the purpose of the products that the children will be designing, making and evaluating and who the products will be for, e.g. Stone Age style party. Develop and agree on design criteria. This could include criteria relating to healthy eating and varied diet e.g. What are the needs of the intended user? <i>What do you need to consider to make it part of a balanced diet? How do we select the ingredients? How could we make it appealing to eat?</i> Give pupils the opportunity to engage in discussion and generate a range of realistic ideas. Ask pupils to record ideas using labelled drawings. Pupils work in groups to choose one idea to follow through and create a design plan.</p>		<p>Storyboard Balanced Diet wheel Sketching pencils</p>	<p><a href="https://www.gov.uk/government/publications/the-eatwell-guide">https://www.gov.uk/government/publications/the-eatwell-guide</a></p> <p><a href="https://frommybowl.com/healthy-berry-crumble/">https://frommybowl.com/healthy-berry-crumble/</a></p> <p><a href="http://mrjennings.co.uk/teacher/DT/D&amp;T%20Lower%20KS2%20project%20sheets.pdf">http://mrjennings.co.uk/teacher/DT/D&amp;T%20Lower%20KS2%20project%20sheets.pdf</a></p>	

Ask the children to consider the main stage in making the food product, including who will do what - pupils could produce a flowchart or storyboard to show the order and write their recipes.				
<b>4: Making, Finishing and Evaluating (double lesson): Ready, Steady, Cook.</b>				
Links to previous learning	Knowledge	Skills, Concepts and Vocabulary:	Assessment criteria:	Curricular links:
Children will have identified the product they are going to make. They will have a clear understanding of the purpose of the product and of needs and wants of the intended user. Pupils will have developed design criteria and will have planned the main stages of a recipe.	<p><b>Substantive knowledge:</b> (<i>What students should know</i>)</p> <p><b>Making and Finishing</b> That food and ingredients need to be prepared and mixed to create products. A range of ways to prepare and combine ingredients. The importance of a balanced and varied diet. The sensory qualities of different food and ingredients.</p> <p><b>Evaluating</b> That evaluations of ongoing work are essential to identify and rectify problems.</p>	<p><b>Skills</b></p> <ul style="list-style-type: none"> <li>• Begin to prepare and cook dishes, safely and hygienically.</li> <li>• Use some of the following techniques to prepare food with increasing confidence: peeling, chopping, grating, slicing, kneading and mixing</li> <li>• Understand that recipes can be changed by adding or taking away ingredients</li> <li>• Select from a range of tools, equipment and ingredients suitable for the task.</li> <li>• Begin to use their design criteria to evaluate their product identifying both strengths and areas for development</li> <li>• Consider how their product can be improved.</li> </ul> <p><b>Key Vocabulary/concepts:</b> Ingredients (and names) tools, utensils (and names) prepare, combine, slice, peel, mix, grate, bake, bridge and claw, Finish/finishing, appearance,</p>	<p><b>Can your children:</b> Use a range of tools, utensils and techniques to prepare ingredients? Understand and follow safety and food hygiene procedures? Know about the ingredients used in their product and explain why they were chosen?</p> <p>Evaluate ongoing work and the final product referring to design criteria. Judge the extent to which their product suits the intended purpose and needs of the user. Consider views of others when evaluating their product.</p>	<p><b>Horizontal:</b> Spoken language - ask questions to develop knowledge and understanding. Give clear responses to questions. Consider the views of others. Writing - produce a written evaluation of the finished product using appropriate headings/ subheadings</p> <p><b>Vertical:</b></p>

		appealing, evaluate, design criteria, intended user, purpose, improvements			
<b>Suggested activities:</b>		<b>Resources:</b>	<b>Useful links:</b>		
<p><b>Make and Finish</b>  Give pupils the opportunity to revisit their recipes and recap the order in which they will make their food product.  Pupils work in groups to collect the ingredients, tools and utensils required for their product and use their design plan and design criteria as an ongoing guide. Encourage the children to evaluate their developing products by referring to the design criteria.  Encourage pupil to consider the finish of their product by referring to their design plan e.g. <i>How will you present your product? How are you making it look appealing?</i>  Pupils complete their products and photograph.</p> <p><b>Evaluation (could be a separate lesson)</b>  Pupils evaluate their own final product against the intended purpose and user, reflecting on the design criteria previously agreed e.g. <i>Does the product suit the purpose? Does it suit the intended user? Do the ingredients go well together? Have the ingredients been prepared using the best process? How has the product been presented? Does it look appealing? Is it an innovative design?</i> Encourage pupils to consider improvements to their project e.g. <i>Did anything not work well? How could the product be improved?</i>  Pupils take part in peer evaluation expressing opinions about others' work and taking into account what others think of their product when considering how the product might be improved. Pupils complete a written evaluation of their product.</p>		<p>Suitable equipment and utensils e.g. knives, chopping boards, weighing scales, measuring jugs, bowls, spoons, baking trays, Relevant ingredients</p>	<p><a href="https://frommybowl.com/healthy-berry-crumble/">https://frommybowl.com/healthy-berry-crumble/</a></p> <p><a href="http://mrjennings.co.uk/teacher/DT/D&amp;T%20Lower%20KS2%20project%20sheets.pdf">http://mrjennings.co.uk/teacher/DT/D&amp;T%20Lower%20KS2%20project%20sheets.pdf</a></p>		