



# Mendell Primary School Aspire Challenge Achieve Medium Term Plan Design Technology

Year	Term:	Teacher: Sa	rah	Subject lead:	Overview: Food – celebrating culti	ire and	Key End Points: I	By the end of this unit chi	ildren will be able
Group: 6	Spring 2	Wearing		Catherine	seasonality		to:		
·	2022	Dionne San	ati	O'Neill Edwards				moist cooking techniques	
							Understand seasonal		
				T	15	·	Know about specialis		
Links to	Relevant		Future	High Quality	Risk Assessment:			DATA project on a page sh	eets attached at the
other	Learning		Learning:	Text:	- Food allergies		end of this plan prior to teaching.		
learning:		g: South America		'To Market, To	- Religious cultural food restrictions of the class.	Difference between soup and stew: Soup is any combination of ingredients cooked in liquid. Stew is any dish the		. :	
Y5 –		east based snack		Market' Nikki	- Cooking using an electric hob			bmerging the ingredients wit	
Geography —	and veget	- preparing fruit		McClure  Just listen time;	Sooking using an electric nob			er in a covered pot for a long	
South	una vegen	ubles		refer to specialist				nes is the amount of liquid t	
America				sellers: butchers,				ess liquid than soup. While t	
				green grocer, fish				ing these two, the point at v	
				mongers		becomes	a stew is determined by	how long it is simmered and	d reduced.
_									1
Learning Int	<u>ention</u>		Lesso	<u>on Outline (Key Q</u>	uestions in colour)		<u>Resources</u>	<u>Vocabulary</u>	Lowest 20%
I can name and	I Tk	nis is a DT lasson. In	DT wa dasia	n and make to solve	nrohlams		PowerPoint	Moist cooking	Adaptations Prompt questions
explain differen					t will help us to create a food dish. We are	aoina	Ipads/laptops for quiz	Poach	printed out on
methods of coo					mean? What is a moist cooking method? N		books	Simmer	tables for
with liquid					ds that use a liquid – mostly water however			Boil	children who find
		always. There are four main types of moist cooking — How many can you think of? The four main types of moist cooking are: poaching, simmering, boiling and steaming. Display the following questions and ask children to discuss and brainstorm their ideas. Have you heard of any of these? Have you/your family						Steam	tracking difficult
								Stew	
								Soup	
		cooked using any of these? Can you think of any foods that would be cooked used these different methods? What equipment might be needed? How are they different? Let's learn precisely what these are.							
		Use PowerPoint to discuss following:							
		Steaming. Steaming if when food is cooked above or over boiling water. The boiling water							
		produces steam which cooks the food. The food does not touch the water. Look at the various							
		steamers on the PowerPoint — has anyone seen one or used one?							
		Poaching, simmering, boiling are all very similar. With these cooking methods the food is							
					ne difference between poaching, simmering				
		boiling is th	e temperature	e of the liquid. Look o	at boiling point of water in Celsius and degr	ees.			
	W	hat other liquids co	uld be used fo	or cooking? Answers	could include: milk, water, stock, wine. Oil i	s also			
					g as oil is used to brown food rather than o				
	wi	ith moisture.		,					
					imering, boiling ad steaming are. The y can	draw			
	di	agrams and write to	represent th	is – however they wa	nt to show what they have learned.				

	Investigative and evaluative activities — Explain that year 5 learn about South America so we are going to			
	make a link to this learning (which this class learned about when they learned about the Maya in year 3).			
	Can the children remember any types of food they learned about? Explain to the children you are going to			
	give them a range of traditional dishes from across South America (see resources) — ask the children to use			
	the knowledge they have learned about steaming, poaching, simmering and boiling to sort the foods into			
	methods that use moist cooking methods. Once children have completed this, they can then attempt to			
	estimate which methods were used for each of the dishes that involved moist cooking methods. Stick some			
	in book and label with cooking methods e.g.			
	nasi goreng			
	Boil: Rice and egg. The chicken could be poached			
	Quiz			
	https://quizizz.com/admin/quiz/60a40ba7a49828001c6405b6/poaching-simmering-and-boiling - go to this			
	link and click 'start a live quiz'			
	select 'classic'			
	no need to log in – click the x in the corner			
	select 'team'			
	click continue			
	You will then be given a website and code that children can use to attempt a quiz. Explain to the children			
	that this quiz has questions that are GCSE food technology level so we don't expect the class to get 100%			
	- There are 15 questions — the class should aim to get above 50%.			
	Exit pass: This unit of work we are going to be making a soup. Which moist method do we think is most			
	appropriate for making soup? (Hint: if you boiled soup for a long time, what would happen to the liquid?			
	It would all evaporate). Soup ideally should be simmered, if it starts to boil heavily turn down the heat			
I can disassemble,	This is a DT lesson. In DT we design and make to solve problems.	- Range of shop	Investigative, disassemble	
investigate and evaluate	This lesson we are going to research some existing products on the market to help us plan our ingredients	bought soups	and evaluative activity	
a range of simple	for our soups. We are not going to look at packaging as I don't want this to affect your evaluation of the	decanted in different	Seasonality	
products which are	soup itself. We are going to evaluate various aspects of the soup:	bowls	Butcher	
found in everyday life.	- Appearance	- Photographs/	Fish monger	
	- Smell	photocopies of	Green grocer	
I can talk about	- Texture	ingredients and	Delicatessen	
seasonality and specialist			Dencalessen	
shops	- Ingredients	descriptions		
	- Taste	Spoons		
	- Other	- IDEA recording sheet		
	- Can you guess the flavour?	- Seasonality calendar		
	This type of activity is called IDEA: Investigative, disassemble and evaluative activity—we are going to			
	explore 4 readymade soups **Risk assessment: allergies or religious/cultural food avoidance. (Have these			
	decanted and heated prior to lesson and labelled A, B, C, D) and photograph/photocopy ingredients list			
	and any description. Children investigate the different soups and record their thoughts on the IDEA sheet.			
	Encourage explanations e.g. rather than just saying it smells horrible explain why rather than saying the			
	colour is good say why			

\*\*Risk Assessment — when children are tasting if sharing a bowl they must use a clean spoon every time and not put a spoon in the bowl that has been in their mouth — share this with children. Reveal flavours of the soup — their names/packaging and description. Does this change the way anyone feels about any of the products? Discuss effect that packaging and branding can have on influencing thoughts.

When we make our soup we aren't going to be creating packaging so we can focus solely on the food. We are going to be celebrating British culture by using British ingredients. To do this, we are going to learn about seasonality. What is seasonality? Share ideas. Seasonality is fresh food that is ready to eat and at its best during a particular season. Hand out the British seasonality calendar and ask children to review this in groups using the prompt questions:

Which month has the most food? Why could this be?

Which months have the least food? Why could this be?

What do we call a specialist shop that sells meat?

What do we call a shop that sells fish?

What do we call a shop that sells fruit and vegetables?

How could you get lamb in December?

How could we preserve food to make it last longer?

Discuss answers to above questions:

Which month has the most food? Why could this be? Summer months produce most food due to good weather.

Which months have the least food? Why could this be? Spring months tend to have less food possibly due to colder weather over the winter.

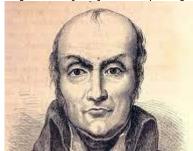
What do we call a specialist shop that sells meat? Butcher

What do we call a shop that sells fish? Fish Monger

What do we call a shop that sells fruit and vegetables? Green Grocer

How could you get lamb in December? It could be frozen earlier in the year. It could be from abroad e.g. New Zealand

How could we preserve food to make it last longer? Freeze food, pickle, dry, cook and put in a jar or tin. The tin can was invented by an English Man in 1810. His name was Peter Durand and he changed the way we store food forever. Especially as cans are now endlessly recyclable.



Ask the children if they know what a delicatessen is.... Encourage discussion and feedback ideas. A delicatessen is a **specialist food shops that sells specialist foods typically from abroad. These usually include cold meats and cheese.** Discuss how specialist shops such as butcher, fish mongers, bakery, green grocers and delicatessens tend to mostly stock seasonal food and celebrate British food culture. This means the food is typically higher quality as it is food at its best. However, this tends to mean that food in these shops is more expensive that that available in a super market. Discuss quality v price.

	Ask children to record what they have learned in their books: I know about seasonality and specialist shops.			
	NB: For next lessons children will be designing and making soups in a group. You may want to base these groups upon feedback on the children's responses to the IDEA e.g. if four children in class showed they all like chicken soup — they could go together. Put children in four groups of 5 and two groups of 4 (6 groups in total)			
I can plan a soup recipe following a design brief	This is a DT lesson. In DT we design and make to solve problems.  Share Design brief: Design, make and evaluate a soup for the children in your group that is seasonal and healthy.  Discuss children's understanding of what constitutes a healthy diet. Clarify that by 'healthy' we mean it is balanced; using a range of different food types from the 'eat well plate'. Variety is key when planning a healthy diet. Identify purpose, product, and user.  Purpose: soup that uses seasonal British foods  Product: healthy soup  User: Children in the group.  Discuss how the fact they are making soup for a group of children adds a new dynamic as they are going to have to plan ingredients that everyone in their group likes and may well have to compromise. Display this eat well plate to the class. Discuss with children ingredients that could be used from each section:  Carbohydrates: pasta, rice, lentils, croutons, potatoes  Vegetables and fruit: refer to seasonal calendar which foods are in season now for this time of the year? Herbs come in this section are used to give food flavour.  Dairy: cream can be stirred through soup or add a swirl at the end. Cheese can also be used to make a creamy soup  Fats: butter can be added to soup to give it extra flavour  Meat and poultry: These can be added in meat form or as stock (stock pots rather than stock cubes or bags of stock). Explain to children that stock is used to give flavour to soups otherwise soup would just be water and vegetables. Stock can be beef, chicken, lamb, fish or vegetable (vegetable stock would obviously not be from this section of the eat well plate)  Children complete their designs as a group.	Design sheet	Design brief	

I can make soup using moist cooking methods	Teacher to source ingredients for children from green grocers/ butchers/ fish mongers where possible. Video yourself visiting these local shops and buying the ingredients or ask another member of staff to go and zoom call in to the classroom so the children can see the seasonally available produce in the shops.  Local shops are the greengrocer Raby, Claremont farm Bebington, Not just fruit Cross Lane Bebington, The little Green Grocers in New Ferry. There is a local butcher in Bromborough and a bakery on Allport road near the Merebrook pub. It is important for children to see these shops to help understand seasonality.  The focus for this lesson is to concentrate on cooking techniques — moist cooking (simmering). Therefore the preparation of veg could be done prior to lesson by staff.  Children in groups make their soups (an additional adult will be needed to cover the class whilst the teacher makes the soup with the children or the additional adult can make the soup with the children as long as they have a thorough understanding of this unit of work). As there are six groups this will have to take place over a number of days  **Risk assessment: Cooking using an electric hob. Discuss fire blanket and fire extinguisher. This is also a good opportunity to discuss basic first aid and what to do if someone is burned. Food preparation rules to be discussed. If meat is being used discuss different colour chopping boards.  Add ingredients to pan and cook soup. Whilst cooking recap on moist methods. Are we poaching, simmering, boiling or steaming the soup? (simmering is ideal — if the soup boils too long the liquid will evaporate away). If the soup starts to boil rather than simmer — what can we do? How will we know when the soup is ready?  Children can either: sit and eat the soup together to test it or it can be packed up to take home in plastic tubs.  Children complete their evaluation sheets as soon after tasting the food as possible.	-Pan - hob - Range of ingredients as designed by the children (prepared by a member of staff prior to the session) - Plastic tubs if children taking soup home - Bowls and spoons if children eating soup in school	Simmering Boiling Poaching Temperature Bubble Heat Reduce Ingredients	
I can evaluate my soup	Children complete their evaluation sheets as soon after tasting the food as possible.			

Homework: Due to lock down and curriculum overhaul, this year group have missed a unit on Baking and roasting due to Covid — set children task of making a yeast based product at home to accompany their soup.

1. Year Groups

Years 5/6 2. Aspect of D&T

Food

Focus

Celebrating culture and seasonality

# 4. What could children design, make and evaluate?

bread pizza savoury biscuits savoury scones savoury muffin cereal snack soup other – specify

### 7. Links to topics and themes

Festivals Cultures/Celebrating Diversity
Celebrations Special Events Seasons
Sustainability Food Our Local Community
other – specify

#### 5. Intended users

themselves younger children parents older people grandparents visitors people with special dietary needs consumers from a variety of cultures other – specify

### 8. Possible contexts

home school leisure culture traditions enterprise healthy eating local environment/community sustainability wider environment global citizenship other – specify

#### 6. Purpose of products

festival celebration special event for sale food for travel picnic visit other – specify

# 9. Project title

Design, make and evaluate a (product) for (user) for (purpose)
To be completed by the teacher. Use the project title to set the scene for children's learning prior to activities in 10, 12 and 14.

11. Related learning in other subjects

Mathematics and computing - making use of

mathematical and computing skills to present

vocabulary including sensory descriptors. Give

Geography - distribution of natural resources

Computing - use technology purposefully to

results of sensory evaluations graphically,

Spoken language - developing relevant

Science - using and developing skills of

handling and interpreting data

well-structured explanations.

retrieve digital content.

## 16. Possible resources

nformation about food from around the world

video clips of foods in the context of where they come from, used and eaten

range of relevant examples of foods to taste and evaluate

basic recipes

suitable equipment and utensils to make and cook recipes such as: weighing scales, measuring jugs, bowls, spoons – various sizes, baking trays, parchment paper, plastic film

# 17. Key vocabulary

ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs

fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality

utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble

design specification, innovative, research, evaluate, design brief

# 3. Key learning in design and technology

### Prior learning

- Have knowledge and understanding about food hygiene, nutrition, healthy eating and a varied diet.
- Be able to use appropriate equipment and utensils, and apply a range of techniques for measuring out, preparing and combining ingredients.

#### Designing

- Generate innovative ideas through research and discussion with peers and adults to develop a design brief and criteria for a design specification.
- Explore a range of initial ideas, and make design decisions to develop a final product linked to user and purpose.
- Use words, annotated sketches and information and communication technology as appropriate to develop and communicate ideas.

#### Making

- Write a step-by-step recipe, including a list of ingredients, equipment and utensils
- Select and use appropriate utensils and equipment accurately to measure and combine appropriate incredients.
- Make, decorate and present the food product appropriately for the intended user and purpose.

### Evaluating

- Carry out sensory evaluations of a range of relevant products and ingredients. Record the evaluations using e.g. tables/graphs/charts such as star diagrams.
- Evaluate the final product with reference back to the design brief and design specification, taking into account the views of others when identifying improvements.
- Understand how key chefs have influenced eating habits to promote varied and healthy diets.

#### Technical knowledge and understanding

- Know how to use utensils and equipment including heat sources to prepare and cook food.
- Understand about seasonality in relation to food products and the source of different food products.
- Know and use relevant technical and sensory vocabulary.

# 10. Investigative and Evaluative Activities (IEAs)

- Children use first hand and secondary sources to carry out relevant research into existing products to
  include personal/cultural preferences, ensuing a healthy diet, meeting dietary needs and the
  availability of locally sourced/seasonal/organic ingredients. This could include a visit to a local bakery,
  farm, farm shop or supermarket e.g. What ingredients are sourced locally/in the UK/from overseas?
  What are the key ingredients needed to make a particular product? How have ingredients been
  processed? What is the nutritional value of a product?
- Children carry out sensory evaluations of a variety of existing food products and ingredients relating to the project. The ingredients could include those that could be added to a basic recipe such as herbs, spices, vegetables or cheese. These could be locally sourced, seasonal, Fair Trade or organic. Present results in e.g. tables/oraphs/charts and by using evaluative writing.
- Use a range of questions to support children's ability to evaluate food ingredients and products e.g.
  What ingredients help to make the product spicy/crisp/crunchy etc? What is the impact of added
  ingredients/finishes/shapes on the finished product?
- Research key chefs and how they have promoted seasonality, local produce and healthy eating.

### 12. Focused Tasks (FTs)

- Demonstrate how to measure out, cut, shape and combine e.g. knead, beat, rub and mix ingredients.
- Demonstrate how to use appropriate utensils and equipment that the children may use safely and hydienically.
- Techniques could be practised following a basic recipe to prepare and cook a savoury food product.
- Ask questions about which ingredients could be changed or added in a basic recipe such as types of flour, seeds, garlic, vegetables. Consider texture, taste, appearance and smell.
- When using a basic dough recipe, explore making different shapes to change the appearance of the food product e.g. Which shape is most appealing and why?

# observing, questioning, changing state of ingredients.

18. Key competencies

problem-solving teamwork negotiation

consumer awareness organisation motivation

persuasion leadership perseverance

other – specify

# 13. Related learning in other subjects

- Science properties of materials and changes of state.
- Mathematics measuring mass kg/g.
  Understand and use approximate equivalences between metric and imperial units.
- Spoken language new technical vocabulary.

# 19. Health and safety

Pupils should be taught to work safely and hygienically, using tools, equipment, techniques and ingredients appropriate to the task. Prior to undertaking this project risk assessments should be carried out, including identifying whether there are children who are not permitted to taste or handle any food ingredients or products.

20. Overall potential of project

# 14. Design, Make and Evaluate Assignment (DMEA)

- Develop a design brief and simple design specification with the children within a context that is authentic and meaningful. This can include design criteria relating to nutrition and healthy eating.
- Discuss the purpose of the products that the children will be designing, making and evaluating and who the products will be for.
- Ask children to generate a range of ideas encouraging innovative responses. Agree on design criteria
  that can be used to guide the development and evaluation of the children's product.
- Using annotated sketches, discussion and information and communication technology if appropriate, ask children to develop and communicate their ideas.
- Ask children to record the steps, equipment, utensils and ingredients for making the food product drawing on the knowledge, understanding and skills learnt through IEAs and FTs.
- Evaluate the work as it progresses and the final product against the intended purpose and user reflecting on the design specification previously agreed.

### 15. Related learning in other subjects

- Mathematics measurement of mass kg/g; understand and use approximate equivalence of metric and imperial units.
- Art and design using and developing drawing skills.
- Spoken language articulate and justify answers and opinions. Listen and respond to adults and peers.
- Writing purpose of writing e.g. for planning and evaluation.
- Mathematics measurement of mass kg/g.
- Science recognise the impact of diet on the way their bodies function.

# Design Decisions Design 2 Purpose Purctionality Authorificity



Years 5/6

# Food

Celebrating culture and seasonality

# Instant CPD



# Tips for teachers

- When rubbing in flour and fat, keep ingredients and hands cool.
- The purpose of kneading bread is to strengthen the gluten (the protein in grain such as wheat), it normally takes about 10-12 minutes by hand. When ready the dough will be smooth, elastic and hold its shape.
- When developing a product e.g. soup, that requires chopping and slicing of ingredients refer to the Y3/4 Food Project Planner.
- Limit the number of ingredients added to the basic recipe and discuss when is the best time to add the new or changed ingredient(s).
- Emphasise the importance of accurate weighing and measuring.
- Some supermarkets and bakeries will allow children to visit. This could be linked to an enterprise project with a class-based food company.
- Children could design packaging for their food products as part of work on structures linked to mathematics.
- Carry out a survey to find out which cultural/seasonal food products are preferred by family and friends.
- For homework, encourage children to grow edible plants such as herbs.

# Useful resources at www.data.org.uk

- Christmas Ginger Bisquits
- Willy Wonko's Fair Trade Cookles
- Making Bread using the Six Essentials
- Are you Teaching Food in Primary D&T?
- A to Z of DaT
- Make it Safe!

# Other useful web-based resources:

www.foodafactoflife.org.uk

# Possible products











Savoury muttins

# Possible techniques that children could use







Mixing to combine ingredients if making savoury mulfins or scones

Rubbing in to mix fat and flour if making a yeastbased product

Kneading a bread dough

# Sensory evaluation

When carrying out sensory evaluations of products and/or separate ingredients, begin with a whole class activity then use group work to develop ideas.

### Example of a recording table:

Type of cultural/seasonal food product	Appearance	Smell	Texture	Toste
Savoury scone	Golden/rough	Fresh/baked	Crumbly	Cheesy
				1

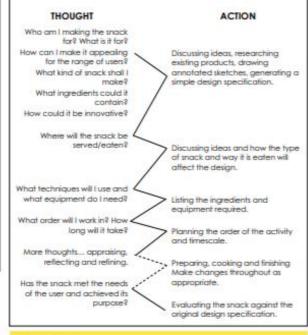
Children can also use simple ranking and rating tables as well as star diagrams.

Use packaging and/or the internet to find out about the nutritional content of the food products and the ingredients. Link this to the principles of a healthy and varied diet.

Edible plants grown in the school grounds can also be evaluated and considered as potential ingredients for products the children will later design, make and evaluate. The benefits/difficulties of selecting seasonal, organic and/or locally sourced ingredients can be discussed here.

# Designing, making and evaluating a yeastbased snack for parents and children participating in the school sports day

An iterative process is the relationship between a pupil's ideas and how they are communicated and clarified through activity. This is an example of how the iterative design and make process might be experienced by an individual pupil during this project:



# Glossary

- Finishing related to the appearance of the product shape, decoration and colour.
- Rubbing in rubbing the dry ingredients together with the fat, lifting to put air into the mixture, so that it resembles fine breadcrumbs.
- Knead pulling and squeezing dough to make it smooth.
- Bran the hard, protective shell of a grain of wheat.
- Dough a mixture of flour, yeast and water before it is cooked.
- Endosperm the store of food inside a seed.
- Germ part of the seed where the root and shoots grow from.
- Yeast a finy plant which makes bubbles of carbon dioxide when mixed with flour and warm water.
- Unleavened bread flat bread where yeast has not been added.

