

Alder Coppice Primary School - Knowledge Organiser

Design & Technology

Year 5

Unit 2: Food Technology - bread (Links to DT Year 4 Unit 2)

What I will know by the end of this unit

To know how to be hygienic when preparing/storing/cooking food

To know the difference between sweet and savoury

To know how to use heat sources safely to create meals

To know how to follow a recipe and adapt a recipe

Key Facts about bread

- The earliest bread was made in or around 8000 BC in the Middle East, specifically Egypt.
- Bread comes in a variety of forms and has historically been a staple food of many countries around the world
- Different breads are made to accompany different food dishes
- Different types of flour can be used which will result in different flavours and texture to the bread
- Before a new product is released, market research and tasting is conducted
- Kneading and proving are an essential part of bread making.
- Know that bread is made from a dough of flour and water

Unit Specific Vocabulary

Design - a drawing of a product to be made

Purpose - what/how something is used for

Sketches - a rough drawing of an idea

Evaluate - to say what is good about something and what can be improved

Market research - asking the public their opinions

Ingredient - Item that is usually put into a recipe

Dough - a mixture of flour, water, fat etc that is baked to make bread or pastry

Kneading - Work (moistened flour or clay) into dough or paste with the hands by squeezing .

Proving/ fermentation - The dough is left to rise. This is called proving . The yeast produces carbon dioxide gas, which causes the dough to rise.

Gluten - Protein found in flour. Gives the dough its stretchy characteristics .

Shaping - The gluten should now be thoroughly distributed. The dough is shaped and left to prove again.

Knocking back - To create an evenly textured bread the dough is kneaded to release some of the gas. It is left to rise again.

Skills and Enquiry

- The history behind the product (bread) Where did it originate? What are the key ingredients?
- What are the key techniques used to make bread? Does this impact taste and texture?
- Different tastes of different breads (sensory experience)
- The risks involved with baking a loaf of bread - What equipment will I need? How can using the equipment pose a risk to health and safety?
- How to design, make and evaluate my own loaf of bread against a chosen success criteria.



Ingredients	Function
Strong plain flour	Has a high gluten content, gluten is a protein, when mixed with water it forms an elastic and stretchy dough. Gluten sets when cooked at high temperatures .
Salt	Adds flavour, controls the action, yeast strengthens the gluten
Yeast	Raising agent, producing CO2 gases which makes the bread rise. Correct conditions needed to grow – food, warmth, moisture and time.
Liquid	Binds ingredients together to help the development of gluten. The liquid should be warm.

Faults after baking	Reason
Lack of volume, heavy and closed texture.	Dough is too tight due to insufficient liquid. Too much salt added. Not enough yeast. Dough over fermented, causing the gas pockets to break down. Low gluten content due to incorrect flour used. Insufficient Kneading or proving given.
Dough collapsing when placed into the oven.	Over proving
Lack of crust colour	Dough over fermented. Lack of salt. A hot dough and/or skinning during final proof will certainly cause lack of bloom and healthy crust colour. Oven to cool
Uneven texture with holes and crust breaks away.	Too hot oven. Insufficient proving. Dough left uncovered during proving and surface dried out.

Types of Bread			
			
WHITE BREAD	WHEAT BREAD	WHOLE GRAIN BREAD	RYE BREAD
			
CROISSANT	PRETZEL	BAGEL	FRENCH BREAD
			
HAMBURGER BUN	HOT DOG BUN	PITA BREAD	ROLLS
			
<h3>Health and Safety</h3> <ul style="list-style-type: none"> Remove jewellery and tie back long hair. Wear an apron and roll up your sleeves. Tie your apron securely. Wash your hands with hot water and antibacterial soap, for at least 20 seconds Use different chopping boards and knives for raw meat & other foods. Check the dates on food, and check for allergies & diet e.g. vegetarian, vegan. Make sure that you clean up properly after yourself. 			