



# Knowledge Organiser: Year 11

## NEA 1 & 2

### Using our senses

A range of senses are used when eating food.

- sight;
- smell;
- hearing;
- taste;
- touch.



A combination of these senses helps to evaluate a food.

### Appearance

The size, shape, colour, temperature and surface texture all play an important part in helping to determine first reactions to a food.

### Taste

There are five basic tastes:

- bitter;
- salt;
- sour;
- sweet;
- umami.

### Smell (odour or aroma)

The nose detects volatile aromas released from food. An odour may be described by association with a particular food, e.g. herby, cheesy, fishy.

The intensity can also be recorded. Odour and taste work together to produce flavour.

### Hearing (sound)

The sounds of food being prepared, cooked, served and eaten all help to influence our preferences. The sound of eating food can alter our perception of how fresh a food is, e.g. crunchy carrots.

### Tasting vocabulary (sensory attributes)

Sight	Opaque Smooth Solid Steaming Sticky Thick	Flaky Firm Heavy Icy Juicy Moist	Acidic Aromatic Bland Citrus Earthy Fragrant Brittle Crackle	Spicy Strong Sweet Tart Weak Zesty Pop Sizzle
Smell	Rich Salty Savoury Smoky Sour Spicy Zesty	Bitter Bland Floury Hot Mild Piquant Bubbly Cheesy Close Cloying Coarse	Strong Sweet Tangy Tart Umami Zesty	
Sound				
Taste				
Touch				

### Sensory evaluation and tests

Sensory evaluation analyses and measures human responses to food and drink, e.g. appearance, touch, odour, texture, temperature and taste. In order to obtain reliable results, sensory evaluation tests should be set up in a controlled way to ensure fair testing, e.g. no distracting colours, noise or smells; same size portions; coded samples, and water to drink.

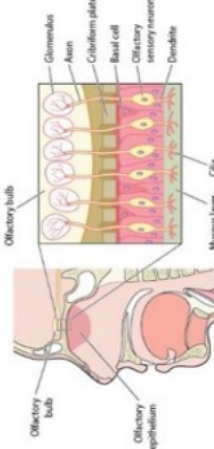
**Preference tests** - these types of tests supply information about people's likes and dislikes of a product. They are not intended to evaluate specific characteristics, such as crunchiness or smoothness. They are subjective tests and include hedonic, paired comparison and scoring.

**Discrimination tests** - these types of tests aim to evaluate specific attributes, i.e. characteristics of products (crunchiness). They are objective tests and include triangle, duo trio, ranking and paired comparison.



### Olfactory system

This is the sensory system used for olfaction, or the sense of smell. As we breathe in, the olfactory receptor cells are stimulated by odours and the olfactory membrane sends neural messages up the olfactory nerve to the brain.



### TASTE BUD



Our tongues are covered with taste buds, which are designed to sense chemicals in the mouth. Most taste buds are located in the top outer edges of the tongue, but there are also receptors at the back of the tongue as well as on the walls of the mouth and at the back of the throat. As we chew food, molecules mix with saliva, enter taste pores and interact with gustatory hairs, also known as taste receptors. This triggers nerve impulses that are transmitted to the brain.

### Taste receptors

### Key terms

**Fair testing:** Ensuring that sensory tests obtain reliable results.

**Food texture:** The way food is felt by the fingertips, tongue, teeth and palate.

**Olfactory system:** The sensory system used for olfaction, or the sense of smell.

**Senses:** Sight, smell, hearing, taste and touch are all used when eating food and drink.

**Sensory attributes:** Words used to describe the appearance, odour, taste and texture of a food product.

**Sensory evaluation:** Analyses and measures human responses to food and drink.

### Intensity

Foods may be described by association, e.g. meaty, minty or fruity.

The intensity (low, medium or high) can also be recorded, e.g. garlicky or salty.

### Tasks

1. Write a guide to conducting sensory evaluation tests that are fair and reliable.
2. Research umami and make a dish that is rich in the taste of umami.

To find out more, go to:

<https://bit.ly/2Bzsgg5>

Glue Here



# How do we use Knowledge Organisers in Food Technology??

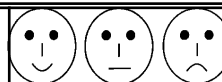
## How can you use knowledge organisers at home to help us?

- **Retrieval Practice:** Read over a section of the knowledge organiser, cover it up and then write down everything you can remember. Repeat until you remember everything.
- **Flash Cards:** Using the Knowledge Organisers to help on one side of a piece of paper write a question, on the other side write an answer. Ask someone to test you by asking a question and seeing if you know the answer.
- **Mind Maps:** Turn the information from the knowledge organiser into a mind map. Then reread the mind map and on a piece of paper half the size try and recreate the key phrases of the mind map from memory.
- **Sketch it:** Draw an image to represent each fact; this can be done in isolation or as part of the mind map/flash card.
- **Teach it:** Teach someone the information on your knowledge organiser, let them ask you questions and see if you know the answers.

## How will we use knowledge organisers in Food Technology??

- **Test:** We will do regular low stakes tests to check your ability to retrieve information from memory.
- **Improve our work:** Once you have finished a green sheet you may be asked to check your knowledge organiser to see if there is any information on it that you could add into your answer.

### Fundamental knowledge



Mark

#### Spring Term

1	NEA 1 – Intro		
2	NEA 1 – Section A (5 marks)		
3	NEA 1 – Section B (15 marks)		
4	NEA 1 – Section C (10 marks)		
5	NEA 2 - Intro		
6	NEA 2 - Section A (15 marks)		
7	NEA 2 - Section B (45 marks)		
8	NEA 2 - Section C (10 marks)		