

OBHS Core Questions:

Subject: Food and Nutrition

Year and Term: Year 11 Autumn term

Topic: The science of food



Learn these questions to build a strong foundation of knowledge for this half-term. Ask family or friends to test you regularly, or practise on your own using the 'Look, Say, Cover, Write' method.

	Question	Answer
1.	Name three methods of heat transfer	Conduction, convection, radiation
2.	Give an example of a water-based cooking method	Boiling, stewing, steaming, poaching, braising, pressure cooking
3.	Protein foods can be denatured on four ways. What are the four ways?	Heat. Reduction of PH. Enzymes. Mechanical actions
4.	During cooking of a quiche, the egg filling changes texture. In what ways does the texture of the quiche filling change during baking?	It changes from being runny to being set due to coagulation.
5.	What is the name of the protein in wheat flour?	Gluten
6.	State two actions that are required for wheat flour to form gluten	Water must be added, kneading must take place
7.	Gluten is formed from two proteins in wheat: glutenin is one, what is the other?	Gliadin
8.	What is the term used to explain browning in foods NOT as a result of either dextrinization or caramelisation?	Enzymic browning
9.	Explain one way to prevent browning of cut apples.	By using an acid such as lemon juice. Remove the presence of air such as placing in water for cooking.
10.	What is the scientific term for the effect of dry heat on starch?	Dextrinisation
11.	Dextrin's attract moisture from the air. What is the scientific term for this?	Hygroscopic
12.	Describe three functions of raising agents in food preparation	To increase volume. To make a light texture. To raise mixtures.
13.	A baker wants her shop assistants to understand raising agents. She uses examples in her shop. What is the raising agent in the flan sponge?	Air
14.	Describe how the raising agent is incorporated into the sponge.	The raising agent is incorporated by whisking air into the sponge mixture.
15.	Which raising agent is used in scones?	Baking powder, Bicarbonate of soda or cream of tartar
16.	What gas would the raising agent produce?	Carbon dioxide
17.	Explain how the raising agent works during baking.	The heat of the oven causes the agent to become active and produce the gas. The gas swells with heat and raises the scone.
18.	What is an enzyme?	Molecules that control chemical reactions in food
19.	Which microorganism is used to make salami, pepperoni and chorizo?	Lactic acid
20.	The temperature of the freezer should be what?	-18 o C and below