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## What do you know about bacteria?

Complete the table. You may refer to your text if necessary.



Bacteria name	Source of contamination	Foods involved	Symptoms
Salmonella	Found in the of animals, particularly Cross-contamination is frequently the cause of contamination.	Raw meat, poultry and It may occur in foods that have not been properly	Vomiting, diarrhoea and listlessness within hours.
Clostridium perfringens	Raw meat, coated in soil and food handling.	Cold and meat such as casseroles and stew.	
Staphlyococcus	Many people carry this bacteria in passages, mouths and infected skin. It is by coughing and sneezing.	Foods eaten cold such as custards, cold meats and pre-prepared fare.	Vomiting, and abdominal cramps within hours.
(Escherichia)	Lives in the of humans and animals and is transferred by poor hygiene in the workplace.	Raw and meat and poultry.	Abdominal upset and severe diarrhoea. May be for young children.
Listeria	Dust, water,, shellfish, and insects.	Milk products, soft, manufactured meats and soft ice-cream.	Nausea, vomiting and diarrhoea within hours.



## Storing bread

Have you ever noticed how some bread goes stale when stored incorrectly? Design and conduct your own experiment to discover more about the storage of bread and find the best ways to store and preserve bread.

#### Aim



To test the keeping quality of bread by comparing a home-made loaf with a commercially produced loaf.

#### Equipment

Method		
1		
2	=	
3		

4 \_\_\_\_\_

Diagrams —

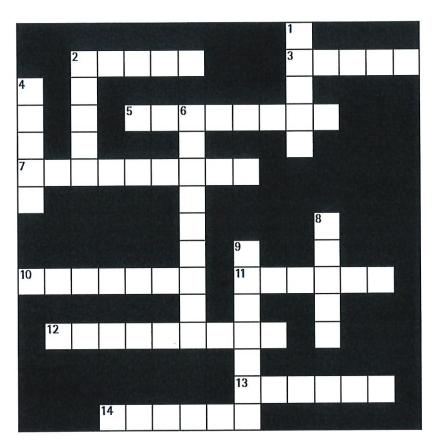
Results		
Conclusion		

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## 1.3 Vocabulary

## Sensory properties of food crossword





#### **Across**

- 2 A spicy meal.
- 3 A typically sour food.
- 5 If a flavour is strong, it is said to be \_\_\_\_\_.
- 7 These are found on the tongue and are used to detect different flavours.
- 10 Flavour is said to be the combination of taste and smell, \_\_\_\_\_ and appearance.
- 11 Sometimes certain colours lead us to \_\_\_\_\_ certain flavours.
- 12 A typically sweet food.
- 13 The first sensory property that is seen in a food.
- 14 A typically bitter food.

#### Down

- 1 When a flavour is weak, it is said to be
- 2 A typically salty food.
- 4 The main sense used when eating.
- 6 Texture is also known as \_\_\_\_\_\_
- 8 A sense that helps to determine whether food has gone 'off'.
- 9 This food has a crisp texture.





### Denaturation of egg whites

#### Aim

To observe and record denaturation of egg whites.

#### Ingredients

6 eggs

1 teaspoon salt

1 teaspoon sugar

1 teaspoon lemon juice or

tartaric acid

1 teaspoon bicarbonate of soda

#### Equipment

Electric beaters

6 small bowls

Stopwatch

Pen and paper



#### Method

- 1 Carefully separate the egg yolks and egg whites. Place each egg white in a separate bowl.
- 2 Number the bowls from 1 to 6.
- Using electric beaters on a high setting, beat the first egg white until it forms stiff peaks. Use your stopwatch to record the time taken. Observe the consistency of the mixture.
- 4 Beat the second egg white as described in Step 3. Use a stop watch to record the time taken. Keep beating this egg white for another 2–3 minutes after the peaks have formed. Record the time taken and observe the results.
- 5 Add salt to the third egg white then beat as described in Step 3. Observe and record your results, including the time taken.
- 6 Add sugar to the fourth egg white then beat as described in Step 3. Observe and record your results, including the time taken.
- 7 Add lemon juice or tartaric acid to the fifth egg white then beat as described in Step 3. Observe and record your results, including the time taken.
- 8 Add bicarbonate of soda to the sixth egg white and then beat as described in Step 3. Observe and record your results, including the time taken.

#### Results

Egg no.	Time taken	Final consistency
1	6	
2		
3		
4		
5		
6		

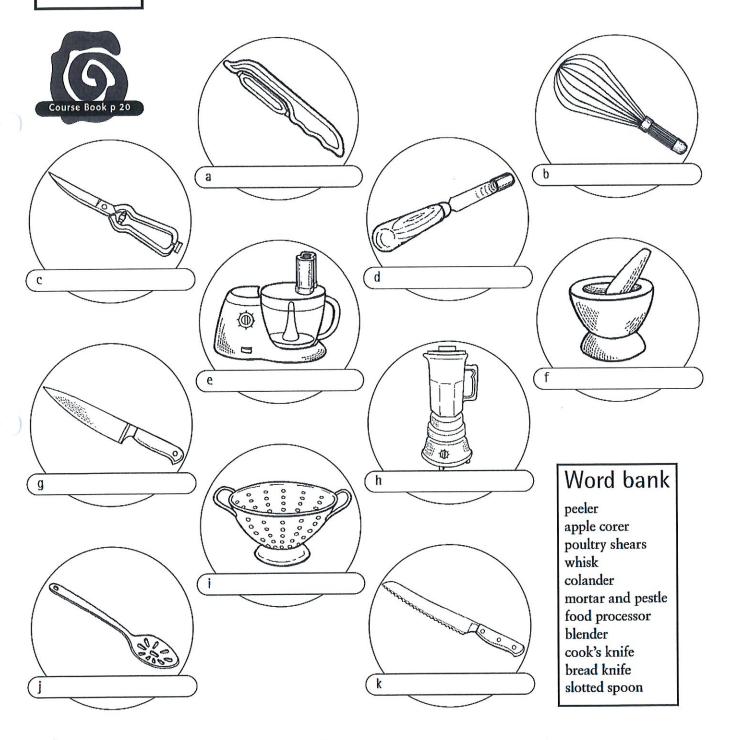
- Explain the process of denaturation.
- Which additive(s) aided the stiffening of the egg white?
- 3 Why do you need to be accurate with the timing and speed of the electric mixer?
- 4 Explain what happens when the egg white is over-beaten.



## 1.5 Vocabulary

## Food preparation utensils and equipment

Identify the utensils and equipment shown below.







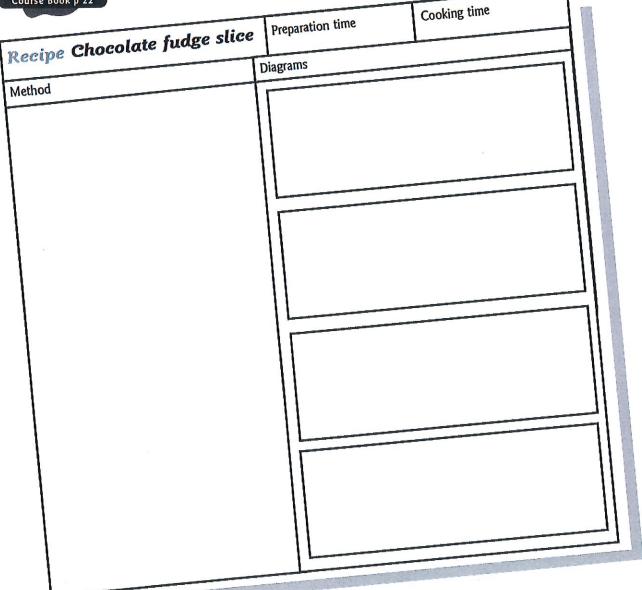
Literacy

## Making a recipe card

### Chocolate fudge slice

Design a recipe card for this recipe using 'plain English' (no jargonistic cooking terms). Include diagrams for each step and label all equipment or utensils used.







### Food additives

- 1 Match the definitions using the additive list provided below.
- 2 List one food that this additive may be used in.



Additive	Description	Food
	Prevent food products from drying out	
	Used to help keep dry, powdery products from clumping together	
	Give a food product a uniform consistency and texture	
	Protect foods against the action of micro-organisms	٠
	Sweeten a product without the use of sugar	
	Improve or restore the taste or flavour of a food	
	Add or restore colour in food products	

#### Additive list

- anti-caking agents
- artificial sweeteners
- colours
- flavourings
- humectants
- preservatives
- thickeners and vegetable gums

### Activity

Bring in a package of a processed food product such as a packet sauce mix or bag of crisps. Observe the additives present in the ingredient list. Swap your product with a partner and then discuss your findings. Record the additives below.

Product name \_\_\_\_\_ Product name \_\_\_\_\_ Additives present \_\_\_\_\_ Additives present \_\_\_\_\_



3	//-		
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CLASS

# 1.8 Vocabulary

## Big bickies flowchart

A flowchart is a diagrammatical representation of a process.

Use the symbols below to construct your own flowchart for making Milk Arrowroot biscuits as described in the text. Show how the product is manufactured including the raw ingredients, processes and steps involved in making the finished product.



(	$\overline{\bigcirc}$	operation		inspection
7	$\bigvee$	storage	D	delay/wait
		operation and inspection	ightharpoons	transport/ movement



## 1.9

Vocabulary

### Garnish findaword

celery curl cherries chocolate coulis crouton cream doily icing sugar lime wedge mint parsley piping sauce shallot strawberries tomato rose van dyke wafer zest



С	С	E	S	0	Р	Ε .	R	С	L	D	D	R	L	S
R	Z	Н	Н	E	K	1	Н	E	0	1	Α	Z	R	0
E	Υ	1	0	Υ	I	E	P	1	F	G	Υ	E	U	L
A	Н	E	D	С	R	R	L	1	U	Α	T	E	С	I
M	D	N	L	R	0	Υ	R	S	N	Q	W	T	Υ	M
В	Α	М	1	S	С	L	G	E	L	G	Υ	Ν.	R	Е
٧	1	Е	F	M	R	N	Α	F	В	M	Z	E	Е	W
P	S	Υ	T	E	1	Α	R	T	T	W	С	М	L	E
Υ	Р	S	G	С	Х	Х	Р	0	Е	Α	Α	L	E	D
С	E	F	1 .	N	С	0	U	L	ı	S	S	R	С	G
Z	Н	R	Е	С	U	Α	S	L	ı	J	N	T	T	Е
N	0	T	U	0	R	С	Α	Α	P	Х	P	N	Х	S
T	Z	В	S	S	Н	0	Α	Н	N	E	N	Q	L	E
Р	0	0	Q	Z	Н	Х	В	S	Q	Z	Α	1	В	Н
T	0	M	Α	T	0	R	0	S	E	T	Q	В	T	С



## Design an experiment

There are many forces that might damage eggs, such as pressure (crushing or squeezing), temperatures (hot or cold) and physical movement (being dropped). What other forces can you think of?

Design an experiment that tests the protective qualities of an egg carton.



#### Aim

To test the protective qualities of an egg carton and determine whether it is a suitable form of packaging.

Equipment	Method		
Results			
Conclusion			



NAME		CLASS	
	Chapter test	6	TOTAL
	Chapter test	Course Book p 34	50

## Food preparation and processing

Tri	ue or false?			-				
1	You must wash your hands with cold, soapy water	befor	e preparing food.					
2	Dehydration is a relatively new form of food prese	rvatio	n.		10			
3	pH is a measure of acidity and alkalinity.							
4	To blanch something is to boil it for a long period	of tim	e.					
5	5 Texture is not one of the sensory properties of food.							
6	6 Flavour is a combination of taste and smell.							
7	7 Dextrinisation is the browning process formed by the action of heat on sucrose.							
8	8 Syneresis is seen when liquid weeps from a lemon meringue pie.							
9	9 Labour-saving devices are generally mechanical.							
10	Paper and cardboard packaging is very difficult to	print	on.					
Sh 1 2	Ort answer questions  State two rules for personal hygiene.  Define 'cross-contamination' and describe how it occurs.	3	Explain one reason why legislation exists.  Identify the three group micro-organisms.		3			



NAME				$\overline{}$	CLASS	
	1	Chapter test co	ontinu	ied		
5	List three favour bacterial growth	rable conditions for	3	13	List three utensils used in the kitchen.	3
6	Name one bacteria associated with food poisoning and state one source of contamination.		2	14	What does it mean to 'bake' something?	1
7	Identify one environmental cause of food spoilage.		1	15	Explain the difference between primary processing and secondary processing.	4
8	-	oisture levels may affect on and give an example answer.	4	16	Select one packaging material. Describe it and outline one advantage and one disadvantage.	3
9	Why are watern suitable for free	nelon and lettuce not zing?	1			
10	List four sensor	y properties of food.	4	17	What is modified atmosphere packaging?	2
11	Name one food caramelisation.	product that undergoes	1	18	What does it mean if a product is biodegradable?	1
12	Name one prod gelatinisation.	luct that undergoes	1			

_			15.7	
	N	A	M	F

CLASS



## Chapter review



## Food preparation and processing

It is now time to test your successful completion of this chapter. Use the checklist below. Provide relevant information or examples to show that you understand what you have studied.

Students learn to	Information, examples or comments
Demonstrate safe, cooperative and hygienic work practices.	
Assess food handling requirements for a variety of food situations.	
Describe legislation specifically linked to food safety.	
Outline the causes of food deterioration and spoilage.	
Identify ingredients that pose a high risk for food deterioration and spoilage.	
Describe techniques and methods that make food products less prone to deterioration and spoilage.	
Explain the principles of food preservation.	
Describe a range of methods used to preserve and store food safely.	
Apply the principles of food preservation and storage when producing food products.	
Discuss the reasons why basic ingredients need to be cooked for consumption.	
Appreciate the role food components play in the sensory qualities of food.	
Examine the functional properties of a variety of foods.	
Prepare food products that demonstrate the functional properties of ingredients.	
Identify the properties of foods that make them suitable for particular preparation techniques/cooking methods.	



NAME			CLASS			
l Cha	pter review conti	inued				
Create food items using combin	Create food items using combinations of basic ingredients.					
Explain how different cuisines a ingredients and techniques.	are created by varying basic		н			
Generate procedural text to ou preparing food products using						
Demonstrate appropriate selection of techniques and equipment in food preparation.						
Discuss social implications of t domestic food preparation equ						
Explain how various methods of food processing and preparation affect the physical characteristics of food.						
Outline ways in which nutritive loss can be minimised during preparation and processing.						
Identify the various levels of food processing and accompanying changes.						
Identify the role of additives in food processing.						
Discuss the environmental, social, health and economic implications of food processing.						
Select and apply appropriate presentation techniques and styles of service for various occasions.						
Outline the functions of packaging, including its persuasive effect on consumers.						
Suggest suitable packaging for a variety of food types in different circumstances.						
Identify food labelling requirements.						
Consider the ethical issues reg	arding declarations of ingred	ients.				
List the activities and inform the most this unit.	ation that you enjoyed		for improvement where re required for you to cor ne topic.			

