## Food and Consumer Education Activity Book: Answers

## Activity Book: Answers

## Chapter 1 BALANCED DIET

## Exercise 1A (page 2)

Q1 A balanced diet contains all the nutrients in the correct amounts to meet individual nutritional needs. It can be achieved through consuming a variety of foods in moderation.

## Exercise 1B (page 3)

| Nutrient (main) | Food sources | Functions |
| :---: | :---: | :---: |
| Carbohydrates | - bread <br> - potatoes <br> - rice <br> - pasta | Carbohydrates are the main source of energy for the body. |
| Proteins | - beans <br> - eggs <br> - fish <br> - meat <br> - pulses | - Growth, repair and maintenance of body cells <br> - Source of energy when there is a lack of carbohydrate and fat intake |
| Fats | - oils and spreads | - Keep the body warm by preventing heat loss from the body <br> - Protect internal organs such as the heart and kidneys by covering them with fat |

## Activity Book: Answers

## Exercise 1C (page 4)

## Vitamin A <br> Why do we need it?

- Keeps our skin healthy
- Allows us to see better in dim light

Where is it found?
Animal sources

- cheese, egg yolk, liver and milk

Plant sources

- capsicum, carrot, mango, papaya and spinach


## Vitamin C

Why do we need it?

- Helps absorb iron from food
- Helps to heal wounds

Where is it found?
Guavas, oranges and strawberries, broccoli, capsicum and kale

## Calcium

## Why do we need it?

- Builds strong bones and teeth
- Controls muscle contractions
- Helps blood to clot normally


## Where is it found?

Animal sources

- cheese, fish with edible bones, milk and yoghurt
Plant sources
- broccoli, kale and soya beans


## Vitamin D

Why do we need it?
Helps the body absorb calcium for strong bones and teeth

## Where is it found?

Cheese, egg yolk, liver and salmon

## B-group Vitamins

Why do we need them?
To release energy from food
Where are they found?
Animal sources

- beef, egg, liver, milk and tuna

Plant sources

- banana, barley, nuts, peas and seeds


## Iron

To keep red blood cells healthy

## Where is it found?

Animal sources

- beef, egg yolk, tuna

Plant sources

- caixin, kale, kidney beans


## Activity Book: Answers

## Exercise 1D (page 5)

Q1 Simple and complex carbohydrates
Q2 ice cream, chocolates
Q3 Fats

- Keep the body warm by preventing heat loss from the body
- Protect internal organs such as the heart and kidneys by covering them with fat Water
- Maintains body temperature
- Removes waste products through urine and sweat Dietary fibre
- Keeps the digestive system healthy by removing waste from the body


## Exercise 1E (page 6)

Fats (any three answers)

- Butter
- Ghee
- Lard
- Canola oil
- Corn oil
- Olive oil
- Peanut oil
- Soya bean oil
- Sunflower oil

Water (any three answers)

- Plain water
- Soup
- Watermelon


## Sodium chloride

- Bacon
- Pickled vegetables
- Salted nuts
- Table salt


## Activity Book: Answers

## Exercise 1F (pages 7-8)

Q1

| $\mathbf{1}$ | It is found in oranges. | Vitamin C |
| :--- | :--- | :--- |
| $\mathbf{2}$ | It keeps our skin healthy. | Vitamin A |
| $\mathbf{3}$ | They help to release energy from food. | B-group vitamins |
| $\mathbf{4}$ | It builds strong bones and teeth. | Calcium |
| $\mathbf{5}$ | It helps to protect our body from disease. | Vitamin C |
| $\mathbf{6}$ | It helps our bodies absorb calcium. | Vitamin D |
| $\mathbf{7}$ | It is found in carrots. | Vitamin A |
| $\mathbf{8}$ | It is needed to keep red blood cells healthy. | Iron |
| $\mathbf{9}$ | It helps the body absorb iron for healthy blood. | Vitamin C |
| $\mathbf{1 0}$ | It maintains fluid balance in the body. | Sodium chloride |

Q2

| Food | Modification |
| :--- | :--- |
| Rice | Brown rice |
| Pasta | Wholewheat pasta |
| Plain cupcake | Wholemeal cupcake / banana cupcake / carrot <br> cupcake |
| White bread | Wholemeal bread |

Q3

## TakeAcfiond Think of your favourite dish.

Student's own response.

## Activity Book: Answers

## Exercise 1G (page 9)

Q1 A A type of carbohydrate
Q2 A Baked beans
Q3 B To keep you hydrated
Q4 A Choose reduced fat cheese
Q5 D All of the above
Q6 D In spinach

## Exercise 1H (page 10)

Q1 Red kidney beans
Q2 Use wholemeal bun instead of plain bun. Add vegetables such as tomato, onion and lettuce.

Q3 Add vegetables such as peppers, onions and mushrooms. Serve with a side salad.

Q4 Mushrooms, lemon juice, garlic, coriander, cinnamon, ginger, thyme, parsley, cayenne pepper, turmeric, rosemary.

## Activity Book: Answers

## Exercise 1I (page 11)

## Karen

Asian chicken breast with brown rice and capsicum: brown rice and capsicum are both high in fibre which helps to guard against constipation.

## Anna

Beef and broccoli stir-fry: beef is rich in iron and vitamin $B$, which are important vitamins in pregnancy. Broccoli is rich in vitamins.

## Exercise 1J (page 12)

Q1 TRUE
Q2 FALSE
Q3 TRUE
Q4 TRUE
Q5 TRUE

Q6 TRUE
Q7 FALSE
Q8 FALSE
Q9 TRUE
Q10 FALSE

## Activity Book: Answers

## Exercise 1K (page 12)

| Sugars |  |
| :--- | :--- |
| Ice cream | Starch |
| Durian | Noodles |
| Soda | Pasta |
| Sweets | Rice |
| Bubble tea | Bread |
| Bananas | Potato |
| Pineapple | Oats |
| Mango | Yam |

## Exercise 1L (pages 13-14)

Q1 A $\quad$ g
Q2 A Butter
Q3 D Lard

Q4 D Lentils
Q5 B Butter

Q6 D 10 tsp
Q7 A Cereal and grains
Q8 D Water

Q9 D To provide the main source of energy for the body
Q10 A To build strong bones and teeth
Q11 D Vitamin D
Q12 C Oranges
Q13 D Yoghurt

## Activity Book: Answers

## Exercise 1M (page 15)

| m | u | y | z | p | r | e | - | 0 | e | n | j | m | w | a |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| m | i | c | d | e | f | $u$ | 9 | $r$ | $+$ | m | $\geq$ | $\dagger$ | s | $v$ |
| r | h | n | g | a | e | n | e | r | g | $y$ | $s$ | 5 | m | e |
| w | a | t | e | $r$ | 0 |  | u | b | t | t | f | t | b | $g$ |
| h | k | x | n | r | x | v | i | t | a | m |  | n | 5 | e |
| 0 | t | e | i | d | a | t | w | r |  | u | b | X | u | t |
| 1 | 1 | 0 | e | k | w |  | c |  |  | i | r | w | g | a |
| e | 0 | h | t | u | a | h | s | $f$ | n | c | e | 1 | a | b |
| m | q | e | 0 | k | d | m | y | z | u | 1 | g | n | r | 1 |
| e | c | a | r | $b$ | 0 | h | y | d | r | a | t | e | t | e |
| a | f | 1 | p | , | w | d | t | S | S | c | $f$ | a | t | s |
| 1 | r | t | n | t | a | t | u | x | m | X | d | d | k | v |
| m | P | h | w | j | b | i | r | z | v | i | X | x | b | p |
| j | n | y | a | w | X | r | a | r | b | i | r | f | j | t |

## Exercise 1N (page 16)

Q1 Proteins, carbohydrates, fats, vitamins, minerals.
Q2 - Eat more fruit and vegetables.

- Swap white rice and noodles for brown.
- Swap white bread for brown.

Q3 Excessive consumption of added sugars over time may be harmful to our health. Sugar is high in calories and excessive consumption can lead to weight gain. Eating too many sugary foods can lead to tooth decay and a spike in blood sugar levels.

Q4 Student's own response.

## Activity Book: Answers

## Exercise 10 (page 17)

Q1 Student's own keywords, questions and answers.
This is an open-ended task that will allow differentiated instruction. Higher-ability students will be able to show their knowledge and understanding by writing more challenging keywords and questions.

## Activity Book: Answers

## Chapter 2 MEAL PLANNING

## Exercise 2A (pages 18-19)

Q1 C Akito consumes more calories than he burns.
Q2 A He will gain weight.
Q3 Akito is eating more calories than he is burning, which can lead to weight gain over time. He should aim to reduce his calorie consumption by eating less food, and increase his exercise until he reaches his energy balance.

Q4 B Marina consumes fewer calories than she burns.
Q5 B She will lose weight.
Q6 Marina is eating fewer calories than she is burning, which can lead to weight loss over time. She should aim to increase her calorie consumption by eating more food, and decrease her exercise regime until she reaches her energy balance.

Q7

[^0]
## Activity Book: Answers

## Exercise 2B (page 20)

Q1


Q2 Answers could include the following:

- If we eat the right amount of food for our energy needs, our body weight is maintained. Activity levels determine the amount of calories we burn, so a person who is more active will burn more calories.


## Activity Book: Answers

## Exercise 2C (page 21)

Q1

| Food items |  | Kilocalories |
| :--- | :--- | :--- |
| 1 | 1 small packet potato chips | 159 kcal |
| 2 | 1 can fizzy drink | 140 kcal |
| 3 | 2 pieces of chocolate biscuits | 120 kcal |
| 4 | 200 g non-fat yoghurt | 110 kcal |
| 5 | 1 small banana | 95 kcal |
| 6 | 2 slices of bread | 82 kcal |
| 7 | 75 g peas | 66 kcal |
| 8 | 1 medium carrot | 28 kcal |

Q2 1 small packet potato chips, 1 can fizzy drink, 2 pieces of chocolate biscuits
Q3 2 slices of bread, 75 g peas, 1 medium carrot
Q4I know that I can consume lots of fruits and
vegetables as they contain many calories.


I should limit my consumption of fizzy drinks and snacks as they are high in calories.

$\checkmark$
I know the amount of calories that I am consuming, so that I can manage my food intake.
$\checkmark$ I know how much I need to exercise.

## Activity Book: Answers

## Exercise 2D (page 22)



## Exercise 2E (page 23)

Q1 Choose fruits and vegetables of different colours as these will give you a range of different nutrients.

Q2 Eat two servings of vegetables and two servings of fruit every day. Eat more fruit and vegetables to reduce the risk of constipation.

Q3 Wholegrain cereals such as brown rice, wholegrain pasta, wholegrain breakfast cereals and wholemeal bread can help to prevent diseases such as heart disease and type 2 diabetes.

Q4 Protein is found in eggs, dairy products, tofu, nuts and beans.
Q5 Water is the best drink to choose as it is sugar-free.

## Activity Book: Answers

## Exercise 2F (page 24)

Suggested answers are given below.
I could make breakfast more balanced by:

- adding a bowl of fruit or a glass of orange juice
- $\quad$ swapping the white toast for wholemeal toast
- adding a pot of unsweetened yoghurt to add more calcium.

I could make lunch more balanced by:

- serving plain boiled wholegrain rice
- baking the chicken instead of frying
- adding another vegetable such as curly kale or okra, as these vegetables are higher in calcium.

I could make dinner more balanced by:

- grilling the chicken and serving without the satay sauce
- boiling the noodles
- using wholemeal noodles
- serving with a large side salad instead of onion rings
- adding a soya bean drink.


## Exercise 2G (page 25)

Q1 a. - Dry fry the burger without the oil using a non-stick frying pan.

- Use chicken or turkey mince.
- Reduce the oil to half tablespoon.
b. - Omit the salt from the recipe.
- Use herbs or spices to add flavour instead of salt.

Q2 Student's own response.

## Exercise 2H (page 26)

Q1 Answers could include the following: The traditional milkshake is high in fat and sugar from the milk powder and ice cream. Whole milk contains a good supply of calcium which builds strong bones and teeth. The traditional milkshake is high in calories and could lead to weight gain if consumed frequently over a long period of time.

Q2 Student's own response. Answers could include:

- Use skimmed milk instead of whole milk.
- Use fresh fruit puree to flavour the mix instead of milk powder.
- Top with a spoon of low fat yoghurt instead of ice cream.

Q3 Answers could include the following: The healthier milkshake uses skimmed milk which still contains calcium but is much lower in fat than whole milk. Using fruit puree instead of milkshake powder increases the vitamin content and reduces the sugar content. A spoon of low fat yoghurt also adds more calcium to the drink without excess sugar and fat.

Q4 Student's own response.

## Exercise 2I (pages 27-28)

Q1 a. - Raised cholesterol

- Obesity/diabetes
- Diet high in fats
b. Carrots, wholemeal noodles, lean chicken, spinach

Q2 a. Type 2 diabetes
b. - Damage to the eyes, kidneys, nerves and blood vessels

- Greater risk of heart disease and stroke

Q3 a. - Eating more calories than required

- A lack of physical exercise
b. - Achieve energy balance.
- Eat less food that is high in sugar and fats
- Eat more fruit, vegetables and wholegrains
- Exercise regularly


## Activity Book: Answers

Q4 a. CHD (Coronary heart disease)
b. Student's own response. Answers could include:

- Eat less processed food
- Maintain a healthy weight
- Eat more fruit, vegetables and wholegrains
- Reduce salt intake


## Exercise 2J (page 28)

Q1 - Grill the chicken.

- Serve with wholemeal rice.
- Add a portion of pickled vegetables.
- Reduce the amount of sauce.

Q2 - Change the beef to chicken or fish.

- Serve with wholemeal noodles.
- Reduce the amount of meat and add vegetables such as broccoli or snow peas.
- Reduce the amount of soya sauce or use a low sodium version.


## Exercise 2K (page 29)

| Cutting down on fat | Cutting down on sugar | Cutting down on salt |
| :--- | :--- | :--- | :--- |
| 1Choose steamed or boiled <br> foods. | $1 \quad$ Choose sugar-free drinks. | 1Do not add extra soya sauce <br> to dishes. |
| 2Choose grilled meats and fish <br> instead of fried. | 2Choose water to go with your <br> meal. | 2 Do not add gravy. |
| 3 Avoid choosing thick sauces | 3Avoid ordering dessert or <br> and gravies. | 3Do not add extra salt to your <br> food. |
| 4 Eat skinless chicken. | 4 | 4Choose low-sodium soya fruit instead. <br> sauce. |
| 5 Eat lean meat. | 5 | 5 |

## Activity Book: Answers

## Exercise 2L (page 30)

Q1 a TRUE
b FALSE
c TRUE
d TRUE
e FALSE
f TRUE
g TRUE
h FALSE
i FALSE
j FALSE

Q2

Student's own response.

## Exercise 2M (page 31)



## Exercise 2N (page 32)

Q1 Menu A - Missing Fruit and Vegetables Menu B - Missing Meat and Others

Q2 Answers could include the following: Menu A should remove the foods that are high in saturated fat and sugar and replace these with at least two portions of fruit and two portions of vegetables each day. As a teenage boy, Jordan needs to eat lots of lean protein for growth and repair. He also needs to include starchy carbohydrates to make him feel fuller for longer.

Q3 Answers could include the following: Menu B should continue to include a wide variety of fruit and vegetables but should also include some lean protein and oily fish. Valerie should eat a variety of wholegrain food to help avoid constipation. She should limit fruit juice to one portion each day and drink plenty of water instead.

## Activity Book: Answers

## Exercise 20 (page 33)

Q1 B Body Mass Index
Q2 C 18.5-22.9
Q3 A We gain weight.
Q4 B Doing little or no exercise
Q5 C Fill half your plate with fruit and vegetables.
Q6 C Refined pasta
Q7 D 8-10

## Activity Book: Answers

## Exercise 2P (page 34)

| n | $r$ | e | e | r | w |  |  | $g$ | q | n | x | s | - | m | k |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | d | g | r | v |  |  |  | n | t | e | g | d | u | b |
| a | q |  | a |  |  |  |  | u | d | w | w | k | w | i | a |
| c | d | g | g |  |  |  |  | c | i | j | x | x | e | d | c |
| \\| | u | u | n |  |  | s |  | k | a | j | g | x | i | 0 | t |
| 5 |  | a |  |  |  |  |  | h | b | 1 | m | z | $g$ | s | i |
| b |  |  | t | a |  |  |  |  | e | n | 0 | z | h | d | v |
| P |  |  | f | s |  |  |  | $r$ | t | n |  |  | t | s | i |
| b | 0 | d | S |  | r |  |  | v | e |  | q | u | i | d | t |
| n | t | j | h | e | n |  |  | b | $s$ | d | e | d | g | e | $y$ |
| n | c |  | d | c | b |  |  |  | e | p | t | c | e | m | 5 |
| a | w | n | e | u | r |  |  | f |  | s | w | g | n | s | y |
|  | e | 1 | n | e | n |  |  | r | $g$ | y | i | w | w | a | g |
| $g$ | a | d | t | i | w |  |  | t | X | I | d | t | x | d | c |
| n | i | a | $r$ | g | e |  |  |  | h | w | n |  | $y$ | b | h |

## Exercise 2Q (page 35)

Q1 Answers could include the following:

- Choose brown rice or wholemeal noodles.
- Choose a smaller meal.
- Drink water instead of a sugary drink.
- Ask for your food without sauce.
- Do not order extra side dishes.


## Activity Book: Answers

Q2 a. - Too much salt in the diet

- Being overweight
- Lack of physical activity
b. - Eating foods high in fat
- Diabetes and obesity can raise your risk
c. - Eating more calories than you burn
- High intake of carbohydrates and fats
- Lack of physical activity

Q3 Student's own infographics.

## Exercise 2R (page 36)

Students may include the following points:

- Eating too much fat, salt and sugar can lead to various health problems such as diabetes, heart attack and stroke.
- Changing cooking methods can help reduce the fat content, for example: steaming or baking instead of frying.
- Reduce salt by not adding salt when cooking and reduce consumption of salty foods such as gravy and processed meats.
- Eat less sugar by not eating too many sweets and chocolates. Eat fruit instead of dessert. Limit sugary drinks or drink low sugar versions.


## Activity Book: Answers

## Chapter 3 FOOD SAFETY AND COOKING OF FOOD

## Exercise 3A (page 37)

| Type of contamination | Examples | How it can be avoided |
| :--- | :--- | :--- |
| Physical | Hair <br> Glass <br> Pest droppings | - Wear an apron <br> - <br> - Tie up hair <br> Cover food and bins |
| Chemical | Cleaning fluid <br> Insecticide <br> Bleach | - Store chemical products away from food <br> - Wash raw vegetables before cooking/eating |
| Microbial | Yeast <br> Mould <br> Bacteria | - Wash hands before handling food <br> - Ensure all utensils are properly cleaned before <br> and after using them |

## Exercise 3B (page 38)

Q1 Cross-contamination occurs when bacteria transfer from one source to another.

Q2

| Example of cross-contamination | Category |
| :--- | :--- |
| Juices from raw meat drip onto cooked vegetables in the refrigerator. | C |
| Handling food after using the toilet without first washing your hands. | C |
| Cleaning the kitchen with bleach and not rinsing it off afterwards. | B |
| Not tying up long hair when cooking and hair falling into food. | A / C |
| Touching raw meat before preparing salad vegetables without washing your hands. | C |
| Spraying insecticide above the food preparation area. | B |
| A plaster falling into food when making bread. | A |

## Activity Book: Answers

Exercise 3C (page 39)
Q1 a. TRUEb. TRUEc. FALSE
d. TRUE
e. TRUE
f. FALSE
Q2 B $\quad 37^{\circ} \mathrm{C}$
Q3 Answers could include the following points:- Raw meat and poultry-juices are sources of bacteria.

- Eggs and shellfish may carry bacteria inside and outside their shells.
- Soils on root vegetables may be contaminated with bacteria.
Q4 a. Food poisoning is caused by bacteria entering the body from the food we eat.
b. Microorganisms include yeasts, moulds and bacteria.
c. Most microorganisms are harmless, but some can cause food poisoning if food is not prepared correctly.


## Activity Book: Answers

## Exercise 3D (pages 40-41)

Q1


Conclusion: Most foods were safe to consume except the dish burger, as it did not reach the correct core temperature during cooking.

Q2 a. Student's own response.
b. Student's own response.

## Exercise $3 E$ (page 42)



## Exercise 3F (pages 43-44)



Q2 a. Because putting hot food in the fridge can cause the temperature inside to rise above $5^{\circ} \mathrm{C}$. It uses more energy to regulate the temperature of the fridge and keep it cool.
b. In a clean plastic or glass container with a lid.

Q3 Cross-contamination occurs when bacteria transfer from one source to another. When the raw meat and uncovered chocolate cake are placed near to each other, juices from raw meat transfer to the chocolate cake, resulting in cross-contamination.

## Activity Book: Answers

## Exercise 3G (page 45)

Q1
a. $\quad 74^{\circ} \mathrm{C}$

Q2 a. Cook food at the right temperature to kill bacteria and make it safe for consumption.
b. When cooking chicken and poultry, check that the internal temperature reaches at least $74^{\circ} \mathrm{C}$.
c. When reheating food, it should reach an inside temperature of $\underline{74^{\circ} \mathrm{C}}$, which will destroy any bacteria found in the food.

## Exercise 3H (pages 46-47)

Q1


## Activity Book: Answers

Q2 a. Some food can be eaten raw such as fruit and vegetables.
b. Cooking food destroys harmful bacteria that could cause food poisoning.
c. Cooking foods can help develop the colour/flavour, such as when baking a cake.
d. Chemical reactions take place when food is cooked, which develops the colour/flavour.
e. Cooking improves the texture of some foods making them easier to chew and digest.
f. Deep-frying can make food crispy.

## Exercise 3I (page 48)

Q1

| Water vapour is produced by boiling water to cook food. |
| :--- | :--- |
| Dry heat is applied to food without any liquid. |
| This is a common way of cooking cakes and cookies, but can |
| also be used for savoury foods such as chicken and fish. |
| Food is submerged in very hot fat. |
| Food is cooked using electromagnetic waves. |

## Activity Book: Answers

Q2 a. baking: Use oven gloves when removing dishes from the oven as it will be hot.
b . deep-frying: Be careful of splattering oil when putting in or removing food.
c. steaming: Be careful when removing the lid of the steamer as the hot steam can cause a severe scald.

## Exercise 3J (pages 49-52)

Q1 Food absorbs more oil in deep-frying than stir-frying.
Q2 Answers could include the following:

| Cooking method | Advantage | Disadvantage |
| :--- | :--- | :--- |
| Boiling | Healthy as no added fat <br> Low energy use <br> Quick method <br> Makes food soft and easily digestible | Water-soluble vitamins lost in <br> cooking water <br> Food may disintegrate if cooked too <br> long |
| Steaming | Energy-saving cooking method <br> Healthy as no fat used <br> Steamed food is soft and easy to <br> digest | Food takes longer to cook <br> Steamed food can lack flavour |
| Deep-frying | Shorter cooking time <br> Makes food appetising <br> Fried foods keep us fuller for a longer <br> time | Can destroy nutrients <br> Can be dangerous |
| Baking | Retains fibre and vitamins | Slow method, takes a long time to <br> cook |
| Microwave | Food cooks quickly <br> Saves energy <br> Can be left unattended while cooking | Food must be left to stand after <br> cooking |

## Activity Book: Answers

Q3 Student's own response, based on the information in the textbook.
Q4 Student's own response. Answers could include the following points:
a. Baking: the flesh will change colour from pink to white, and some browning will occur in the oven.

Boiling: the chicken will change in colour from pink to white and the flesh will become firmer.
b. Baking: the chicken will have a nice golden colour and good flavour. It will be soft in texture but might also have some crispy bits.

Boiling: the chicken might be chewy and the flavour might be quite bland.
c. Student's own response.

Q5 Student's own response.

## Exercise 3K (pages 53-54)

Q1 C Hair
Q2 B Single-celled living organisms, found everywhere.
Q3 D All of the above
Q4 B $\quad 5-60^{\circ} \mathrm{C}$

Q5 D All of the above
Q6 C Store raw and cooked food together
Q7 C To increase the number of microorganisms in the food
Q8 A Condensation
Q9 B Deep-fried food has a very high fat content

## Activity Book: Answers

Q10 D Foods cook quickly so there is little nutrient loss
Q11 C It is a healthy method as no fat is needed
Q12 D Wear brightly coloured nail varnish
Q13 D Warm and moist

## Exercise 3L (page 55)



## Activity Book: Answers

## Exercise 3M (page 56)

Q1 A bin without a lid can attract pests such as flies and cockroaches or even mice and rats A thin bin liner can easily tear and the contents can spill out, which can contaminate other areas of the kitchen and attract pests.

Q2 Physical
Chemical
Microbial
Q3 a. Follow person hygiene rules e.g., wash hands, tie up long hair and wear an apron.
b. Keep the kitchen clean and tidy at all times.

Store chemicals and cleaning products away from the work surfaces.
c. Cook food properly and check the temperature of cooked meat and chicken with a temperature probe to ensure that it reaches a core temperature of $74^{\circ} \mathrm{C}$.

## Exercise 3N (page 57)

Student's own food blog post.

## Activity Book: Answers

## Chapter 4 FOOD AND CULTURE

## Exercise 4A (page 58)

Q1

| Dishes are strong and spicy, using herbs |
| :--- | :--- |
| and spices found in Southeast Asia. |
| Dishes are sometimes cooked in a tandoor |
| or clay oven. |
| Dishes are a mix of East and West; <br> a mix of European and Asian influences. <br> Dishes are sometimes cooked in a wok or <br> steamed in a steamer. |

Q2 Students name two dishes from each cuisine.

## Exercise 4B (page 59)

Student's own response.

## Exercise 4C (page 60)

| Dish 1 Name: Name: Chilli crab | Dish 2 <br> Name: Nasi biryani |
| :---: | :---: |
| Main ingredients: <br> - Mud crab <br> - Chilli paste <br> - Tomato <br> - Ginger <br> - Garlic <br> - Ketchup | Main ingredients: <br> - Rice <br> - Chicken <br> - Onions <br> - Evaporated milk <br> - Ginger <br> - Garlic |

## Activity Book: Answers

## Exercise 4D (page 61)

Q1


Q2 Student's own response, which could include: Kangkong belacan (made with kangkong and chillies) and green Thai curry (made with lemongrass and chillies).

## Activity Book: Answers

## Exercise 4E (page 62)

Dish

## Activity Book: Answers

## Exercise 4F (pages 63-64)

Q1
American

Q2
a. Donburi
b. Ramen
c. Sushi
d. Tempura
e. Mochi

Q3 Korean and German
Q4 Italian
Q5 North American
Q6 Malaysian

## Activity Book: Answers

## Exercise 4G (page 64)

Q1

- Germany
- Italy
- Korea
- Japan
- America
- Thailand
- China
- India


Maki


Pad Thai


Bibimbap


Pecan pie


Spaghetti


Rice dumpling


Chapati


Schnitzel

Exercise 4H (pages 65-66)
Q1 Italian
Q2 Korean
Q3 Mexican
Q4 Thai
Q5 Middle Eastern
Q6 American

## Activity Book: Answers

## Exercise 4I (page 66)

Q1 Student's own response. Sample answer:

| Turkish cuisine |
| :--- |
| Typical breakfast foods: |
| - Çilbir (poached eggs) |
| Börek (baked dish consisting of a savoury or sweet filling wrapped in thinly stretched |
| sheets of dough) |
| Katmer (crisp filo dough filled with pistachio and clotted cream) |
| North American cuisine |
| Typical breakfast foods: <br> - Pancakes and maple syrup <br> - Cream cheese bagels <br> - Eggs, bacon and toast |

Q2 Student's own response.
Q3 Student's own response.

## Exercise 4J (pages 67-68)

Q1 Student's own responses. Suggested answers:

| To what extent do you rate the following aspects of each curry? |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Curry | Aspect | Not at all 1 | 2 | 3 | 4 | Very much 5 |
| Chicken | Spicy |  |  | X |  |  |
|  | Creamy |  |  |  |  | X |
|  | Salty |  | X |  |  |  |
|  | Moist chicken |  |  |  | X |  |
| Thai Green | Spicy |  |  |  |  | X |
|  | Creamy |  | X |  |  |  |
|  | Salty |  |  |  | X |  |
|  | Moist chicken |  | X |  |  |  |

Q2 a. An example answer might state: The Thai green curry was very spicy and the sauce was quite runny. I think the chicken was overcooked as it was quite dry.
The chicken korma was milder than the Thai curry and the sauce was very creamy. The chicken was cooked perfectly and was very moist.
b. An example answer might state: Personally, I preferred the chicken korma because I liked the creamier sauce and the milder flavour.

## Exercise 4K (page 69)

Q1 Student's own response. Answers could include:

- 1800s - early migrant population started selling food in the streets from makeshift stalls.
- After World War II - more people turned to be hawkers as a profession.
- After Singapore's independence in 1965 - the government arranged for hawkers to be licenced and organised in spaces such as back lanes and vacant plots of land.
- 1971 to 1986 - 18,000 hawkers were moved to markets and hawker centres with proper amenities.
- 1980s to present - more than 110 hawker centres are now located across Singapore.
- February 2001 - Hawker Centres Upgrading Programme (HUP) was launched. Hawker centres were improved for both the hawkers and the people eating there.

Q2 Student's own response. Answers could include:

- You can get foods from all around the world at hawker centres.
- Hawker centres have been described as "the culinary soul of Singapore". People from different ethnic groups and social backgrounds can eat together and enjoy a meal.
- Hawker centres are inclusive as there is a range of food on offer - there is something for everyone.
- Hawker centres are easily accessible.
- The food offered is affordable.


## Activity Book: Answers

| Exercise | 4L (pages 70-71) |  |
| :--- | :--- | :--- |
| Q1 | D | Sweet chilli sauce |
| Q2 | C | Malaysia |
| Q3 | B | Indian |
| Q4 | A | Doughnuts |
| Q5 | C | Gochujang |
| Q6 | B | Laksa |
| Q7 | A | Baba ghanoush |
| Q8 | B | Potato |
| Q9 | D | Tortilla |
| Q10 | A | Cantonese cuisine |
| Q11 | D | Tacos |
| Q12 | C | Baklava |

## Activity Book: Answers

## Exercise 4M (page 72)

| w | g | q | C | k | f | c |  | k | i | e | m | I | t | h |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| t | e | d | d | $z$ | i | p | e | r | h | $f$ | e | t | d | 0 |
| a | z | z | i | p | $u$ | b | 0 | z | S | c | b | a | n | m |
| d | a | x | j | b | a | s | q | X | u | y | h | z | 9 | a |
| b | g | f | 0 | b |  |  |  | q | s | x | x | k | h | k |
| u |  | h | f | e | h |  | k | m | k | i | m | c | h | i |
| r | p | n | n | f | $f$ |  | 9 |  | a | 1 | f | b | y | 0 |
| r | f | h | g | a | r | f | m | 0 | z |  | v | a | t | a |
| i | x | e | x | s | f | a | s | m | 9 |  |  | t | j | t |
| t | f | ¢ | h | c | u | 1 | e |  |  |  | 0 | t | n | a |
| 0 | d | $z$ | k | c | e | a | a |  |  | $s$ | e | b | P | k |
| n | k | r | u | s | $f$ | f | r |  |  |  | I | i | q | 0 |
| h | v | r | y | b | a | e | b |  | s | w |  | P | f | 0 |
| b | m | m | a | d | a | 1 | i | h | c | n | e | h | a | m |
| 9 | u | e | $s$ | a | d | i | 1 | 1 | a | 5 | v | P | c | b |

## Exercise 4N (page 73)

Q1 Chinese, Malay, Indian and Eurasian.
Q2 Student answers may vary but might include:

- Chinese: dim sum
- Malay: nasi lemak
- Indian: chicken tikka
- Eurasian: prawn bostador

Q3 Student's own response.

## Exercise 40 (page 74)

Student's own response.

## Activity Book: Answers

## Exercise 5A (page 75)

Answers could include the following points:

- Poor personal hygiene - one chef has loose hair and jewellery and is not wearing an apron.
- The waitress' hair is falling in the soup.
- The bin is open and overflowing.
- Risk of cross-contamination - raw fish and vegetables are next to each other.
- The kitchen is very untidy.
- One chef is carrying a bin bag and chicken at the same time.
- There is a fly on a piece of chicken that is ready to be served.
- The lid has fallen off the saucepan containing hot food. There is a danger of scalding from steam.
- There is a danger of the saucepan lid falling on the floor


## Exercise 5B (pages 76-77)

Q1 Student's own response. Sample answers are given here.


## Exercise 5C (page 78)

Q1

|  | Description |
| :--- | :--- |
| $\mathbf{1}$ | Water vapour is produced by boiling water to cook <br> food |
| 2 | Liquid is heated to $100^{\circ} \mathrm{C}$ before the food is added |
| $\mathbf{3}$ | Food is submerged in very hot fat |
| 4 | Small pieces of food are cooked quickly in a small <br> amount of oil |
| $\mathbf{5}$ | Hot air surrounds the food to cook it on all sides |



Q2

| Technique | Cooking method |
| :--- | :--- |
| French fries | Frying |
| Potato salad | Boiling |
| Mashed potatoes | Boiling |
| Jacket potato | Microwave cooking / baking |
| Potato au gratin | Baking |

## Exercise 5D (pages 79-80)

Q1 Student's own response.
Q2

| Dough making | Rubbing-in | Creaming method | Thin batter | Thick batter |
| :--- | :--- | :--- | :--- | :--- |
| Bread <br> Pasta | Fruity buns <br> Shortcrust pastry | Sponge cake | Pancakes | Banana fritter <br> Tempura |

Q3
a. A Chopping and dicing
b. A To cut food into even-sized cubes
c. C Shortcrust pastry
d. A Pound cakes

## Activity Book: Answers

## Exercise 5E (pages 81-82)

Q1 Student's own response.
Q2 Student's own response.

## Exercise 5F (pages 83-84)

Q1-Q2 Student's own response. Sample answers are shown here, but the results will depend on the size of the eggs and how they are actually cooked.

| Method of cooking eggs | Taste | Texture | Appearance |
| :---: | :---: | :---: | :---: |
| 1 Scrambled eggs in a pan | Eggy and savoury | Semi-solid with some creamy consistency and slightly fluffy | The egg is pale yellow and broken into small pieces |
| 2 Boiled eggs | A mild savoury flavour of the white and mild sweet, earthy flavour of the yolk | Rubbery white with soft and powdery yolk | The white turns opaque and the yolk is solid and dry |
| 3 Fried eggs | Slightly nutty flavour of the white where it has been fried; mild and soft yolk | The white is set and slightly crispy on the bottom. The yolk is soft and runny. | The white is set around the central yellow yolk |
| 4 Poached eggs | A mild savoury flavour of the white and earthy flavour of the yolk | Very soft white and yolk which is runny | The egg will be white in appearance |
| 5 Microwave scrambled eggs | Slightly bland with an eggy taste | Firm and slightly rubbery | Pale yellow with an uneven surface |
| 6 Baked eggs | A mild savoury flavour of the white and mild sweet, earthy flavour of the yolk | Set and rubbery | Set white and visible yellow yolk |

Q3
Exfension A good example might be chicken, which can be roasted, stir-fried, pan fried, grilled or barbecued.

## Activity Book: Answers

## Exercise 5G (page 85)

Student's own response. Sample answers are shown here.

| French fries <br> experiment | Baked | Grilled | Shallow-fried | Air-fried |
| :--- | :--- | :--- | :--- | :--- |
| Time taken <br> to cook | 20 minutes | 15 minutes | 10 minutes | $12-15$ <br> minutes |
| Colour | Golden brown, <br> even colour | Slightly burnt in <br> places, uneven colour | Golden brown, even colour | Light <br> golden <br> brown |
| Texture | Soft in the <br> middle, slightly <br> crisp outside | Might not be cooked <br> all the way through, <br> so might be hard in <br> places and soft in <br> others | Crispy outside and soft in the <br> middle, greasy | Soft on <br> inside, <br> slightly <br> crispy on <br> outside |
| Taste | Slightly dry <br> and a little <br> bland | Slightly dry and a little <br> bland. May taste burnt <br> if not grilled evenly | The frying fat should add more <br> flavour to the potato. More <br> satisfying feel in the mouth | Slightly <br> bland |

## Exercise 5H (pages 86-87)

Q1
C Tofu
Q2 D Vegetables
Q3 B Keeping the kitchen floor clean and dry
Q4 C Remove skin from chicken before cooking it
Q5 A Having a saucer of soya sauce as an accompaniment
Q6 D White rice
Q7 A Bridge and Claw
Q8 A Butter cake
Q9 A Baking
Q10 A Banana fritters

Food and Consumer Education

## Activity Book: Answers

## Exercise 5I (page 88)

| e | r | f | m | I | d | 1 | j | x | e | y | \| | i |  |  | n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a | a | z | z | j | h | f | r | p | h | z | I | e | C |  | 0 |
| C | a | r | a | m | e | I | i | S | e | u |  | 0 | r |  | i |
| e | S | C | t | e | Z | P | $g$ | 0 | g |  |  | h | i |  | t |
| t |  |  | 0 | u | h | $n$ | a |  | u | i | a | X | S |  | a |
| a | $g$ | a | h | a |  | S | a | r | , | m | b | j | p |  | S |
| S | n | g |  | k | g | $g$ | e | 1 | n | d | y | e | y |  | i |
| t | i | j |  |  | u | U | n | g | n | i | y | r | $f$ |  | n |
| e | m | b | f | S | $r$ | $g$ |  | u | Z | k | j | a | a |  | i |
| C | a | u | e | C | $n$ | a | r | a | e | p | P | a | k |  | r |
| a | e | j | r | d | 0 | Z |  | h | t | f | k | C | V |  | t |
| k | t | e | S | a | a | J | i | e | g | e | S | k | k |  | x |
| P | S | i | C | v | v | h | S | S | X | C | t | k | \\| |  | e |
| m | i | C | r | 0 | W | a | V | e | i | b | S | S | m |  | d |
| h | b | X | f | u | k | t | e | b | q | k | C | t | e |  | p |

## Exercise 5J (page 89)

Q1 To reduce the risk of contaminating the food you are preparing. To ensure that food is safe to eat.

Q2 To prevent them from slipping off food and onto fingers.

## Activity Book: Answers

Q3 a. The rubbing-in method involves rubbing-in cold fat into flour until it looks like small crumbs.
b. The creaming method creams fats and sugar together to trap air. This gives cakes a light texture.
c. The one-stage method mixes all the ingredients at the same time until they are light and fluffy. Raising agents such as baking powder help the cake rise. The cake is beaten for a shorter time than in the creaming method.

## Exercise 5K (page 90)

Q1 Student's own response.
Q2 Student's own response.

## Chapter 6 BASIC MONEY MANAGEMENT

## Exercise 6A (pages 91-92)

| Needs | Wants |
| :--- | :--- |
| School uniform | Limited edition sneakers |
| PE attire | New stationery set |
| Textbook | Designer schoolbag |

Q2 A need is something necessary for us to live and function properly, whereas a want is something we would like to have but that is not absolutely necessary for our survival.

Q3 a. Answers could include the following:

- Lack of time
- Lack of cooking skills
- High levels of disposable income
b. Answers could include the following:
- More time to prepare the dish
- Good cooking skills
- Low levels of disposable income
C.

Exfension Possible answers:

- Eating out might fulfil other wants, such as the desire for a particular type of food, or wanting to eat with friends.
- Eating out could become a need if there are no other options, such as being too busy to prepare food or being away from home.
- If we are managing our money responsibly, we will consider how much eating out costs, and whether there might be a better way to eat without spending so much money.


## Activity Book: Answers

## Exercise 6B (page 93)

Q1
a. TRUE
b. FALSE
c. FALSE
d. TRUE
e. TRUE
f. FALSE
g. FALSE

Q2 Answers could include two of the following points. Creating a budget will:

- help her to save money for the things she needs
- help her to stay out of debt
- remind her how much money she has available to spend.

Q3 - What she bought

- When she bought it
- Where she bought it
- How much it cost

Q4 - She might notice that she is buying things that she does not need.

- It might highlight ways in which she could spend less.
- It might give her ideas about how she could save more.


## Exercise 6C (page 94)

Q1 'Living within your means': You do not spend more than you earn, so that you have enough income to cover the things you need to pay for.

Q2 Answers could include three of the following points:

- Keep track of how much money you have coming in and going out.
- Set some money aside (savings) in case of unexpected expenses or emergencies.
- Use money wisely by aiming not to spend more than you earn.
- Be careful not to overspend or buy things you do not need.
- Protect your savings and only use them when absolutely necessary.
- Try not to borrow money.

Q3 a. \$30
b. $\$ 1,560$
c. Answers could include the following points:

- Saving gives you peace of mind and security - if there is an emergency, you already have money put aside that you can use.
- Saving can give you a better future and more options - you could buy a car, pay a deposit on a house, and plan for a holiday.
- Saving can also mean there is money available for the occasional treat you can eat out or make a special purchase.
- Saving money might even earn you more money - your bank may pay you interest on money in your savings account.


## Exercise 6D (pages 95-96)

Q1-3 Student's own response.
Q4 Exfension Possible answers might include:

- They might use special offers such as three for the price of two that might tempt the family to buy more than they need as they may feel they are getting better value.
- They might have loyalty card schemes that might persuade the family to buy certain products.
- They might have adverts on TV and billboards that make the family more likely to buy certain products.


## Activity Book: Answers

## Exercise 6E (pages 97-98)

Q1 • 4 cloves of garlic

- 300 g snow peas
- 400 g chicken breast
- 200 g Thai green curry paste
- 400 ml coconut milk
- 40 g coriander leaves
- 60 ml oil

Q2

| Ingredients | Cost for 4 portions |
| :--- | :--- |
| Garlic clove | $4 \times \$ 0.10=\$ 0.40$ |
| Snow peas | $2 \times \$ 1.30=\$ 2.60$ |
| Chicken breast | $4 \times \$ 2.50=\$ 10$ |
| Thai green curry paste | $1 \times \$ 4.80=\$ 4.80$ |
| Coconut milk | $1 \times \$ 2.00=\$ 2.00$ |
| Coriander leaves | $\$ 2.20$ |
| Oil | $4 \times \$ 0=884$ |
| Total cost | $\$ 21.08$ |

Q3 Student's own response.
Q4 Student's own response.

## Exercise 6F (pages 99-100)

Q1 Answers could include three of the following points:

- Payments are quick and easy, via an app or website.
- This method is very convenient: you can do it any time of day, from any location.
- If funds are transferred, then the money can be accessed immediately.
- Payment is taken right away.

Q2 Answers could include three of the following points:

- Cash can be lost or stolen, and then cannot be replaced.
- Coins can be heavy to carry around.
- If you travel with cash, you need to change currency in different countries.
- It is difficult to use cash to pay for large purchases.
- You need to have sufficient cash on hand.

| Advantages | Disadvantages |
| :--- | :--- |
| Two from: | Two from: |
| - Quick method of payment | -Payment will be declined if you do not have <br> - enough funds |
| - Safer than using cash | - Risk of online fraud |
| - Money is debited immediately | - Contactless technology could copy your |
| - Easier to keep track of your expenditure |  |
| - You cannot overspend | card details |
| - Safer than cash |  |

Q4 Answers could include three of the following points:

- You do not need to carry card or cash.
- This method is fully secure as it uses encryption and a PIN to unlock the wallet and activate payment.
- It is widely accepted by shops.
- It is convenient as most people have smartphones.

Q5 - It is easy to overspend and run up large debts when making in-app purchases, because it is difficult to keep track of how much you are spending.

- You can get caught up in the game and not realise what you are spending.
- To avoid these problems, it is best to play the game without making in-app purchases.
- Do not link the game to your bank account; just make individual purchases to avoid overspending.
- If you do link to your bank account, make sure that you write down all the purchases you make so that you can keep track of what you are spending.
He can only spend the money you have; it is impossible to overspend.
He can set daily limits for spending, which is useful for budgeting.


## Exercise 6G (page 101)

Answers may include any of the following points.

## Advantages

- You can purchase what you need, then pay it off over weeks or months if necessary.
- Payments are typically due 30 days after purchase, so you have time to plan.
- If you pay the amount off in full every month, interest charges are avoided. This is the best way to use a credit card.
- Major credit cards can be used worldwide.
- Major credit cards reduce the need to carry large sums of money overseas or purchase travellers' cheques.
- Some credit cards offer other advantages, such as cashback on purchases or free travel insurance.


## Disadvantages

- There is a risk of overspending - you may lose track of how much money you have spent.
- Interest charges can be very high if you delay repayments.
- Large debts can easily build up, especially if you have more than one credit card.

Students form a conclusion based on their answers.

## Activity Book: Answers

## Exercise 6H (pages 102-103)

Q1 A Creating a plan for how best to spend your money.
Q2 A To spend all your income each month.
Q3 B 20\%

Q4 C To have enough income to cover the things you need to pay for.
Q5
A Cash

Q6
D There are no interest charges to pay.
Q7
D To pay off as much debt as possible.
Q8 A Always make your payments on time.
Q9 D All of the above.
Q10 D You need to have a smartphone.

## Activity Book: Answers

## Exercise 6I (page 104)

| j | h | d | v | i | b | t | e | 0 | m | r | d | m | p | d |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| s | 1 | d | $f$ | s | - | r | $s$ | m | g | s | f | w | u | 1 |
| f | x | y | y | g | f | a | r | e | c | s | h | t | r | h |
| m | c | g | h | c | 0 | n | h | n | r |  | b | x | c | f |
| b | u | q | h | r | r | s | m | f | e | e | $s$ | $f$ | h | 1 |
| j | I | t | w | d | h | f | b | r | d | a | t | i | a | a |
| s | 0 |  |  |  |  | e | 1 | 1 | i | b | h | n | s | z |
| p | k |  | a |  | c | r | q | b | t | g | t | a | i | j |
| c | z |  |  |  |  | 1 | t | u | n | v | w | n | n | y |
| c | e | z | a |  |  | d | m | d | e | h | h | c | g | S |
| v |  | 1 | h | m | n | f | y | g | m | m | f | e | z | w |
|  | a | q | n | I |  | e | c | e | y | y | $\bigcirc$ | s | y | i |
| b | g | m | y | e | m | C | v | t | a | t | q | s | z | f |
| f | I | w | - | J | p | x | $\ddagger$ | e | p | w | d | y | i | f |
| u | m | f | b | y | h | v | a | i | u | n | t | k | f | 1 |

## Exercise 6J (page 105)

Q1 Answers could include the following points:

- Set aside $50 \%$ of income for needs, $30 \%$ for wants and save $20 \%$.
- Set a monthly budget and stick to it.
- Avoid getting into debt by living within her means.


## Activity Book: Answers

Exfension Answers could include the following points:

- Never treat credit as free money.
- If you want to use credit, check how long it is going to take to pay back, and how much interest is charged.
- Never sign up for monthly payments that are higher than you can afford.
- Do not borrow more money to pay off a debt.
- Track your spending.
- Use a budget plan to keep track of any credit payments.
- Work out your finances carefully before taking out credit.
- Do not break the terms of your agreement. This might lead to fines, and you might then have to pay it back all at once.
- Always make your payments on time.
- Do not use multiple credit cards unless you are sure you can make all the payments.

Exfension Both answers (need/want) are acceptable as long as the explanation is logical.

## Chapter 7 SUSTAINABLE CONSUMPTION OF GOODS AND SERVICES

## Exercise 7A (page 106)

Q1 Student's own response. Answers could include:



- $\begin{array}{llllllllllllllll}\mathbf{E}_{1} & \mathbf{N}_{1} & \mathbf{V}_{4} & \mathbf{I}_{1} & \mathbf{R}_{\mathbf{1}} & \mathbf{O}_{1} & \mathbf{N}_{1} & \mathbf{M}_{3} & \mathbf{E}_{1} & \mathbf{N}_{1} & \mathbf{T}_{1} & \text { score }=16\end{array}$


## Exercise 7B (page 107)

Q1
a TRUE
b FALSE
c TRUE
d FALSE
e TRUE
f TRUE
g FALSE
h TRUE
Q2 Ken is more environmentally friendly as a quick shower uses less water.
Q3 Answers could include:

- Wash clothes with the washing machine at a cooler temperature.
- Use energy-efficient light bulbs.
- Switch off electrical appliances when not in use.

Q4 Answers could include:

- Buy local produce.
- Reduce meat consumption as animal products have a higher carbon footprint.

Q5 'Sustainable source' means that the natural resources used to create this product are kept at a steady level that is not likely to damage the environment. Cardboard is one of the most sustainable packaging materials because it is made from wood, a renewable raw material.

## Exercise 7C (page 108)

| Method | Why it saves energy | Dish(es) |
| :--- | :--- | :--- |
| Use a lid on a saucepan. | This keeps heat in the pan, <br> cooking food more quickly. | Chicken stew or vegetable soup |
| Use a microwave oven. | The microwave oven is generally <br> the most efficient way to heat up <br> and cook food because it cooks <br> quickly. | Salmon fillet with rice or noodles |
| Plan meals using the oven. | You can cook more food at once <br> by using all the oven shelves. | Roast chicken and vegetables |
| Use a steamer with several <br> vegetables cooking at once. | Food can be placed in different <br> tiers and cooked together saving <br> time. | Steamed fish with carrots and <br> bok choy |
| Stir-fry your meal. | Because food is cooked quickly, <br> less energy is required. | Mee goreng |
| Whisk, shred, grate or chop <br> by hand rather than using <br> equipment. | No electricity is required. | Salad |
| Make one-dish meal recipes, for <br> example, risotto. | Saves energy as all the <br> ingredients are cooked in one <br> pan. | Egg fried rice |

## Exercise 7D (page 109)

Q1


Q2

| Using the 3Rs | Circle your answer |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Plan meals every week by checking what you have in the fridge. | Reduce | Reuse | Recycle |
| Choose products with less plastic packaging. | Reduce | Reuse | Recycle |
| Put waste paper in the blue recycling bins. | Reduce | Reuse | Recycle |
| Try to mend broken appliances. | Reduce | Reuse | Recycle |
| Use leftovers to create a different meal for the next day. | Reduce | Reuse | Recycle |
| Use refillable bottles and jars. | Reduce | Reuse | Recycle |
| Write a shopping list before you go to the shops. | Reduce | Reuse | Recycle |
| Only order what you can eat. | Reduce | Reuse | Recycle |
| Give pre-used items to the charity shop. | Reduce | Reuse | Recycle |
| Turn food waste into compost. | Reduce | Reuse | Recycle |
| Put food waste in the compost bin. | Reduce | Reuse | Recycle |

## Exercise 7E (pages 110-111)

Q1 Answers could include: households, markets, hawker centres, supermarkets and restaurants.
Q2 Answers could include:

- Only order what you can eat.
- Ask for smaller portions.

Q3 a Answers could include:

- food spoilage (incorrect storage, cooking too much, past its use-by date)
- mistakenly thinking food is inedible, for example, not understanding the best-before and use-by dates
- not storing leftovers properly
- buying too much food
- cooking too much food at mealtimes.
b Answers could include:
- Store food correctly in a refrigerator set at $1-5^{\circ} \mathrm{C}$.
- Plan meals.
- Write a shopping list so that you do not buy more than is needed.
- Look carefully at use-by dates.
- Store leftovers in a covered container in the fridge.
- Lessen the amount of waste that is thrown away.
- Weigh or measure rice and pasta in recipes to avoid cooking too much.

Q4 Answers could include:

- She might have been attracted by the offer even though she cannot eat three wraps.
- Chicken wraps are a high-risk food with a short shelf-life.
- She might have to throw some wraps away because she cannot eat them before they pass their use-by date.

Q5 Answers could include:

- Plan meals in advance.
- Think about portion size and only cook what you can eat.
- Try to use every part of the food, for example, broccoli florets, leaves and stalks.
- Cook vegetables in their skins or peel them very thinly.
- Use vegetable peels to make compost.

Q6 Answers could include:

- Support local produce.
- Walk or cycle.
- Lead an energy-efficient lifestyle.

Q7 Answer could include:

- The Singapore Green Plan 2030 has ambitious plans and challenges us to take firm actions to do our part to build a sustainable future. It also advocates various actions that we can do as individuals to adopt sustainable consumption practices that allow us to reduce our carbon footprint.


## Exercise 7F (page 112)

Q1 Examples of dishes could include the following:
a Cooked rice: egg fried rice, Korean rice pot, spicy chicken rice, nasi goreng
b Cold chicken: chicken and red rice burrito bowls, chicken macaroni soup, chicken fried rice, chicken salad, chicken sandwich
c Stale bread: bread and butter pudding, oven-baked salmon with a herby breadcrumb topping, bread pakoda
d Cold pasta/noodles: fried noodles, pasta salad, sesame spring onions with noodles or pasta, minestrone soup.

Q2 Student's own response.

## Exercise 7G (page 113)

Q1


Fresh, quality-assured local produce
Produce is grown on Singapore farms that are certified for adopting the Singapore Agricultural Practice (SG GAP standard) as a quality assurance system in food production.

Fresh, quality-assured, sustainably grown local produce

Produce is grown on Singapore farms that are certified to have adopted the Singapore Agricultural Practice (SG GAP) and Singapore Clean and Green Urban Farms (SG C\&G) standards. These certified farms improve productivity and maximise resource utilisation, while at the same time ensuring food safety and quality through best industry practices.

Fresh, local produce
Produce is grown on Singapore farms.

Q2 - Supermarkets: Consumers can purchase locally farmed eggs, vegetables and fish at most major supermarkets.

- SG farmers markets: Consumers can easily find and purchase local produce.


## Exercise 7H (pages 114-115)

Q1 a Recycling is the process of using waste products to provide the raw materials to make new ones.
b We should only consider recycling after reducing or reusing waste products.
c Recycling is crucial to help sustain our environment because it converts waste into useful products and conserves natural resources.
d Recycling reduces the demand for raw materials and uses less energy than producing goods from raw materials, resulting in less carbon emissions.

## Food and Consumer Education

## Activity Book: Answers

Q2

| Item | Can be recycled $\boldsymbol{V}$ | Cannot be recycled $\boldsymbol{X}$ |
| :--- | :---: | :---: |
| Glass jar | $\checkmark$ |  |
| Styrofoam |  | $\boldsymbol{X}$ |
| Plastic bottle | $\checkmark$ |  |
| Metal tin | $\checkmark$ |  |
| Used tissue paper |  | $\boldsymbol{X}$ |
| Cereal box | $\checkmark$ |  |
| Tin can | $\boldsymbol{J}$ |  |
| Bulky items |  | $\boldsymbol{X}$ |

Q3 All containers should be washed and dried before putting them into the recycling bin (to remove grease, food contaminants and liquids).

Exfension 40\% of items put into the recycling bins cannot be recycled because they are contaminated by foods and liquids.

Q4

| Product | Packaging material | Can the material be recycled? |
| :--- | :--- | :--- |
| Chocolate bar | Paper |  |
| Foil | Yes |  |
| Pizza | Cardboard box | Yes |
| Orange juice | Tetra pack | Yes |
| Can of drink | Metal | Yes |
| Milk carton | Plastic/Tetra pack | Yes |
| Takeaway food container | Styrofoam | No |
| Potato chip bag | Plastic | No |

## Activity Book: Answers

## Exercise 7I (page 116)

Q1 Eco-labels are used on products and services that meet high environmental standards.
Q2


Q3 Mr Wong should look out for the energy label and the water efficiency label.
Q4 - The energy label shows the efficiency of an appliance - the more ticks there are, the more energy-efficient the device is.

- The water efficiency label helps people select products such as washing machines wisely. It tells them how water-efficient the appliance is.


## Exercise 7J (pages 117-118)

Q1 Answers could include:
a Fruits, eggs, vegetables
b Student's own response.

## Exfension Student's own response.

## Activity Book: Answers

Exercise 7K (pages 118-119)
Q1Q2 C Driving a car
Q3 A Beef
Q4 D All of the above
Q5 D All of the above
Q6 D Styrofoam
Q7 C The total amount of greenhouse gases they individually cause
Q8 C They can be easily recycled
Q9 B Choose air conditioning over a fan
Q10 C Use lids on pots and pans

## Activity Book: Answers

## Exercise 7L (page 120)

| 1 | x | s | $u$ | s | t | a | i | n | a | b | , | e | i | c |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | r | e | c | y | c | I | i | n | g | t | a | a |
| n |  |  | h | c | $n$ | d | z | c | u | p | v | s | c | r |
| e | s |  | e | n | 0 | v | P | y | c | u | t | a | u | b |
| m | $g$ | d |  |  | i | S | I | g | d | v | r | w | r | 0 |
| i | $f$ | n | J |  | t | a | c | $r$ | $r$ | b | i | v | a | n |
| s | z | d | 1 |  | p | y | y | e | 0 | e | q | c | b | m |
| s | d | r | m | c | m |  |  | n | 1 | n | k | q | e | h |
| i | w | 1 | y | z | u |  |  | e) | u | y | m | s | u | 0 |
| 0 | r | h | n | m | s | d | g | n | i | s | $u$ | e | r | z |
| n | i | v | t | I | n | c | e | z | t | h | w | e | n | c |
| 5 | e | c | r | $u$ | 0 | 5 | e | $r$ | r | b | v | k | x | t |
| k | q | $\bigcirc$ | z | v | c | c | e | z | g | $v$ | p | S | z | r |
| b | d | 1 | 0 | C | a | 1 | a | c | d | h | 0 | k | $\times$ | g |
| s | r | e | v | 0 | t | f | e | 1 | c | 0 | x | k | b | g |

## Exercise 7M (page 121)

Student's own response.
Examples may include:
Q1 Travel by car, eat pre-packaged food, use the air conditioner, throw away food, buy water in a plastic bottle.

Q2 Walk or ride a bike to school, reduce the amount of water we use, reuse plastic bags, use reusable containers.

Q3 Use water fountains to refill bottles, switch lights off when you leave the room, have a compost heap and recycling bins.

Q4 Student's own response.

## Activity Book: Answers

## Exercise 7N (page 122)

Students choose one of the topics. They are differentiated, with the more complex topic at the bottom of the list as an extension question. This allows students to choose their own learning journey.

The article should be approximately 500 words and include the following:

- An introduction to the topic, giving definitions, an outline of the topic and why it has become a topical food issue today
- The key issues and their effect on the environment, the farmer (if applicable) and the consumer
- Suggestions of practical ways the consumer (the student) can promote and support the environmental issue
- Images to help make their work more eye-catching and exciting

Students should upload their articles to their Padlet page.

## Chapter 8 BEING A DISCERNING CONSUMER

## Exercise 8A (page 123)

Q1 A discerning consumer is someone who has good judgement and is able to carefully select the most appropriate goods or services to buy or use.

Q2 - Research phones online: read some reviews to find the most suitable phone for his needs.

- Set a budget.
- Shop around for the best deal.

Q3 - Can she afford it?

- Does she really need another handbag?
- How often will she use it?
- How practical is it?

Q4 Consider:

- if the smartwatch comes with a warranty;
- the duration of warranty;
- if there are additional accessories (e.g., cable, charger, screen protector and watchstraps) for free / for a small amount of money.


## Exercise 8B (page 124)

Q1 Right to be heard / Right to seek redress
Q2 Right to be heard
Q3 Right to safety
Q4 Right to choose
Q5 Right to be informed
Q6 Right to seek redress

## Activity Book: Answers

## Exercise 8C (page 125)

Q1
a. TRUE
b. FALSE
c. TRUE
d. TRUE
e. TRUE
f. TRUE
g. FALSE
h. FALSE
i. TRUE

## Exfension

a. Select method of payment
b. Provide feedback tactfully
c. Check the condition

## Exercise 8D (page 126)

Q1 - Use the anti-scam product (ScamShield application (app)) to report the phone number immediately.

- If the message is received on a messaging app, use the app's function to report and block the number.
- Ignore or delete the message.

Q2 - Contact his bank to notify them of the message.

- Ignore the message, and remember never to give out online banking details.

Q3 - Report the seller to the online retailer.

- File a police report.
- Inform her bank.

Q4 He should continue the transaction via the shopping app as it protects the consumer. The shopping app will only release the payment to the online retailer after he has received the mobile phone.

## Exercise 8E (page 127)

Q1 Agree
Reason: Student's own response. Possible reason: It is the café's responsibility to ensure that the food served is safe for consumption.
Accept any other appropriate responses.
Q2 Disagree
Reason: Student's own response. Possible reason: Jane has the right to choose, and the blue dress delivered was what she has chosen. Therefore, there are no grounds for her to seek redress.
Accept any other appropriate responses.

## Q3 Agree

Reason: Student's own response. Possible reason: It is the shop's responsibility to ensure the iced chocolate drink served is safe for consumption.
Accept any other appropriate responses.
Q4 Agree/Disagree
Reason: Student's own response. Possible reason: It is the shop's responsibility to ensure that the mobile tablet is in good condition during the sale.
It is Derlynn's responsibility to check the condition of the mobile tablet before purchasing.
Accept any other appropriate responses.
Q5 Disagree
Reason: Student's own response. Possible reason: Si Ni chose to watch the movie and it is not the cinema's responsibility that she did not enjoy the movie.
Accept any other appropriate responses.
Q6 Disagree
Reason: Student's own response. Possible reason: The shop would need the receipt as proof that the watch is purchased there, and Vincent is unable to present the receipt.
Accept any other appropriate responses.

## Exercise 8F (page 128)

| Scenario |  |  |
| :--- | :--- | :--- | :--- |
| a. $\quad$You eat out at the hawker centre and <br> find a bug in the bowl of noodles <br> halfway through eating. You inform the <br> stall owner of the bug in the noodles <br> and he apologises. The next day you <br> develop food poisoning symptoms and <br> are hospitalised. | a. | Compensation (damages) |
| b.You buy a pair of running shoes after <br> trying them on in a shop. The next <br> day, you go for a run in the new pair <br> of shoes and the soles come off when <br> you start running. | b. | A full refund / Repair or replacement |
| c.The new pair of wired earphones you <br> bought from the electronics store are <br> not working when you test them, right <br> after payment. | c. | A full refund / Repair or replacement |

Q2 a. Contact the shop as soon as possible.
b. Because it shows where and when he bought the games console, and how much he paid for it.
c. He should explain the problem and ask for a full refund or replacement goods.
d. So that Philip can remember exactly what was agreed during the phone call, the date and the timescale.

## Exercise 8G (page 129)

Q1 C Someone with good judgement who can be selective of goods and services.
Q2 D Find out about the product before you buy it.
Q3 A Right to be impulsive.
Q4 B Check that the product has a warning label.
Q5 B A fraudulent activity that tricks people into giving up their personal details or money.

## Exercise 8H (page 130)

| c | e | s | a | h | c | r | u | p | h | h | j | o | g | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| s | e | r | v | i | c | e | $s$ | k | m | h | t | 0 | w | k |
| w | y | w | v | t | f | d | m | x | c | f | 0 | b | d | 0 |
| f | m | P | y | e | n | r | r | e | i | d | 5 | p | u | v |
| v | d | i | n | $g$ | n | e | P | d | 5 | P | m | x | c | k |
| g | I | t | 5 | d | m | s | m | h | t | o | h | b | e | u |
| d | i | m | p | $u$ | 1 | s | e | e | h | b | P | t | 0 | k |
| e | 5 | u | $s$ | b | $s$ | 5 | $u$ | $c$ | g | I | y | r | h | ก |
| $f$ | $g$ | n | i | n | r | e | c | s |  | d | w | q | u | d |
| e | 0 | j | b | e | z | c | w | a | $r$ | 0 | $u$ | h | z | p |
| c | j | 0 | i | g | I | x | I |  | m | a | h | j | 5 | d |
| t | d | t | b | a | d | e | f | h | I | b | z | c | a | v |
| i | t | n | e | m | n | - | r | i | v | n | e | z | d | z |
| v | i | q | z | a | d | w | t | 5 | j | d | z | y | p | s |
| e | f | t | r | d | I | y | t | s | b | p | e | a | $u$ | r |

## Exercise 8I (page 131)

Q1 - When the product is faulty

- When the product does not match the description

Q2 - Contact the shop as soon as possible. This can be done by calling, emailing, writing or visiting the shop in person. Ensure you have a receipt or some other proof of purchase.

- Explain the problem and say what is expected. Show the proof of purchase.
- Make a note of your discussion - what the shop agreed to do and the timescale.
- If necessary, speak to someone in a position of authority.
- If the shop is part of a larger organisation, consider contacting their head office by telephone or email.


## Activity Book: Answers

Q3 You can complain to CASE to settle your claim. If it is not resolved, then you can sue the business in the small claims tribunal or State Courts of Singapore. However, you need to bear in mind that these avenues of redress may incur a cost.

## Exercise 8J (page 132)

Students choose one of the topics, which are differentiated with the more difficult topic at the bottom of the list. This allows students to choose their own learning journey.

## Exercise 8K (page 133)

Student's own response.

## Activity Book: Answers

## Chapter 9 SMART SHOPPING

Exercise 9A (pages 134-135)


Q2 Manufacturer's details are included so that consumers:

- know who made the product; and
- can contact them if they have a problem or query about the product.

Q3 The net weight is the actual mass of the product, excluding the packaging.
Q4 Ingredients are listed in descending order by its quantity (mass).
Q5 Consumers need to know when the food is at its best and safe to eat.

## Q6

a. TRUE
b. TRUE
c. FALSE
d. TRUE
e. FALSE
f. TRUE
g. FALSE

## Exercise 9B (page 136)

Q1 a. Avoid chicken satay with peanut sauce.
b. Avoid egg prata.
c. Elizabeth should avoid hot milk tea (teh tarik).
d. William should avoid chilli crab.

Q2 Eating the food can cause an allergic reaction. This ranges from mild, such as a skin rash, to severe, such as anaphylaxis, which requires immediate medical attention.

Q3 Sally and her friends can inform the hawker of their allergens and ask the hawker verbally if the food they are ordering contains any ingredients that they are allergic to.

## Exercise 9C (page 137)

Q1 Ready-to-eat meal C: Green curry chicken thigh
Q2 310 kcal
Q3 Ready-to-eat meal B: Chicken rendang
Q4 Exfension Ready-to-eat meal A is high in protein but it also has the highest fat and
calorie content of the three meals. Ready-to-eat meal $B$ has the least amount of each nutrient
and is also the lowest in calories. Ready-to-eat meal $C$ has similar amounts of protein and
carbohydrates as ready-to-eat meal A but is lower in fat and calories. Ishita should choose
ready-to-eat meal B.

## Exercise 9D (pages 138-140)

Q1 Online shopping means that you can use the internet to choose and buy different products that are then delivered to your home.

Shopping in-store involves going to the shops to look at items in person. You pay for the goods in the shop and take them home yourself.

Q2 a-c. - Student's own response. Some online retailers they could carry out their research on are: Grab, Lazada, Cold Storage, Sheng Siong and Giant.
d. - Some retailers have high delivery fees that can make the product more expensive than anticipated. If you shop around, you may be able to find the same product from a retailer that does not charge delivery fees.

- Finding out the delivery fees before we order food and products online can help us to budget for the purchase. This allows us to be a more discerning consumer.

Q3 a. ONLINE
b. ONLINE
c. IN-STORE
d. ONLINE
e. IN-STORE
f. IN-STORE
g. ONLINE
h. IN-STORE
i. IN-STORE

Q4 a. True. Websites such as Apple or Levi's will only sell their own products.
b. True. People often use live social media platforms to advertise products and services.
c. True. A search engine is useful to help you search the internet.

Q5 a. Answers could include the following points:

- There is such a wide variety to choose from online: it can be overwhelming!
- Anything you buy must be sent to you, so you do not receive it right away: you have to wait for it to be delivered to your home. If you are buying things from far away, it might take a long time for them to reach you.
- You cannot try things before you buy them.
- It can be difficult to know whether you are buying good-quality items online.
- You have to remember to pay attention to the size of items and check the measurements. It is difficult to see how big or small items are when you just look at a picture.
- It might be more difficult to return items if there is something wrong with them. You have to find out where to send them, check whether you can send them back, pack them up again, and post them or send them by courier. You might have to pay for this postage yourself.
b. Answers could include the following points:
- There is an enormous variety of products to buy from all around the world.
- It is convenient - you can shop whenever you want, day or night. You do not have to wait for the store to open nor rush out at closing time.
- It is easy to compare a wide range of different products to see what is available and how much each product costs.


## Exercise 9E (page 141)

Q1 B Manufacturer's information
Q2 C Freshly cooked nasi lemak
Q3 C Descending
Q4 C Delivery fees
Q5 A Able to make a purchase at any time of the day

Food and Consumer Education

## Activity Book: Answers

## Exercise 9F (page 142)

| 0 | p | 0 | I | e | n | c | g | h | t | u | n | e | r | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| m | 0 | d | e | I | i | C | a | t | e | S | S | e | n | m |
| a | e | t | b | W | p | y | r | e | k | a | b | C | w | u |
| n | m | f | a | Z | a | I | I | e | r | g | e | n | S | a |
| u | 0 | n | I | i | n | e | n | i | a | e | S | w | f | n |
| $f$ | b | i | P | g | t | P | u | u | m | q | h | $g$ | 0 | a |
| a | b | S | t | n | e | i | d | e | r | g | n | i | i | n |
| C | m | a | I | a | y | a | V | m | e | i | t | e | k | f |
| t | Z | y | C | a | m | r | a | h | P | C | n | r | e | h |
| u | C | i | t | I | U | r | 1 | p | u | f | Z | P | e | W |
| r | i | b | t | a | k |  | 0 | a | S | Z | i | m | q | C |
| e | g | m | d | e | t | h | 0 | f | d | 0 | e | m | b | k |
| r | q | e | t | I | S | b | e | W | n | n | g | $p$ | 0 | u |
| 0 | m | t | e | f | I | i | a | g | n | i | V | r | e | S |
| g | i | n | $f$ | 0 | r | m | a | t | i | 0 | n | 0 | W | q |

## Exercise 9G (page 143)

Q1 Answers could include three of the following points:

- You can shop for nearly any item you can think of: there is an enormous variety of products to buy.
- It is convenient: you can shop whenever you want, day or night. You do not have to wait for the store to open, and do not have to rush out at closing time.
- It is easy to compare a wide range of different products to see what is available and how much each product costs.
- You can be sure you are getting a good price because you can see what each site is charging for the product.
- You can shop from anywhere - at home, on the bus - no matter where you are. You do not have to be anywhere near the shop, and you do not have to travel anywhere.
- You can buy things from all around the world.

Q2 Answers could include three of the following points:

- The store may be crowded, and there could be long queues.
- You can only shop during the hours each store is open.
- It may take you a long time or be difficult to travel to the shop you need.
- It might take a long time to find what you need, and you may need to try several different shops.
- You might not be able to find the product you are looking for.
- Shops can only keep a certain amount of stock (because they only have a limited amount of space to display items), so variety and options can be limited.


## Exercise 9H (page 144-145)

Q1 Student's own response.
Q2 Student's own response.

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```
t= top, b = bottom, l = left, r= right, c = centre
```

Illustrations by: Vian Oelofsen, Stéphan Theron


[^0]:    Exfension Energy balance is achieved when food intake (the food we eat) is equal to the energy output (e.g., through physical activities).
    Many factors affect the amount of energy we need, such as our:

    - age
    - gender
    - activity level
    - body size.

