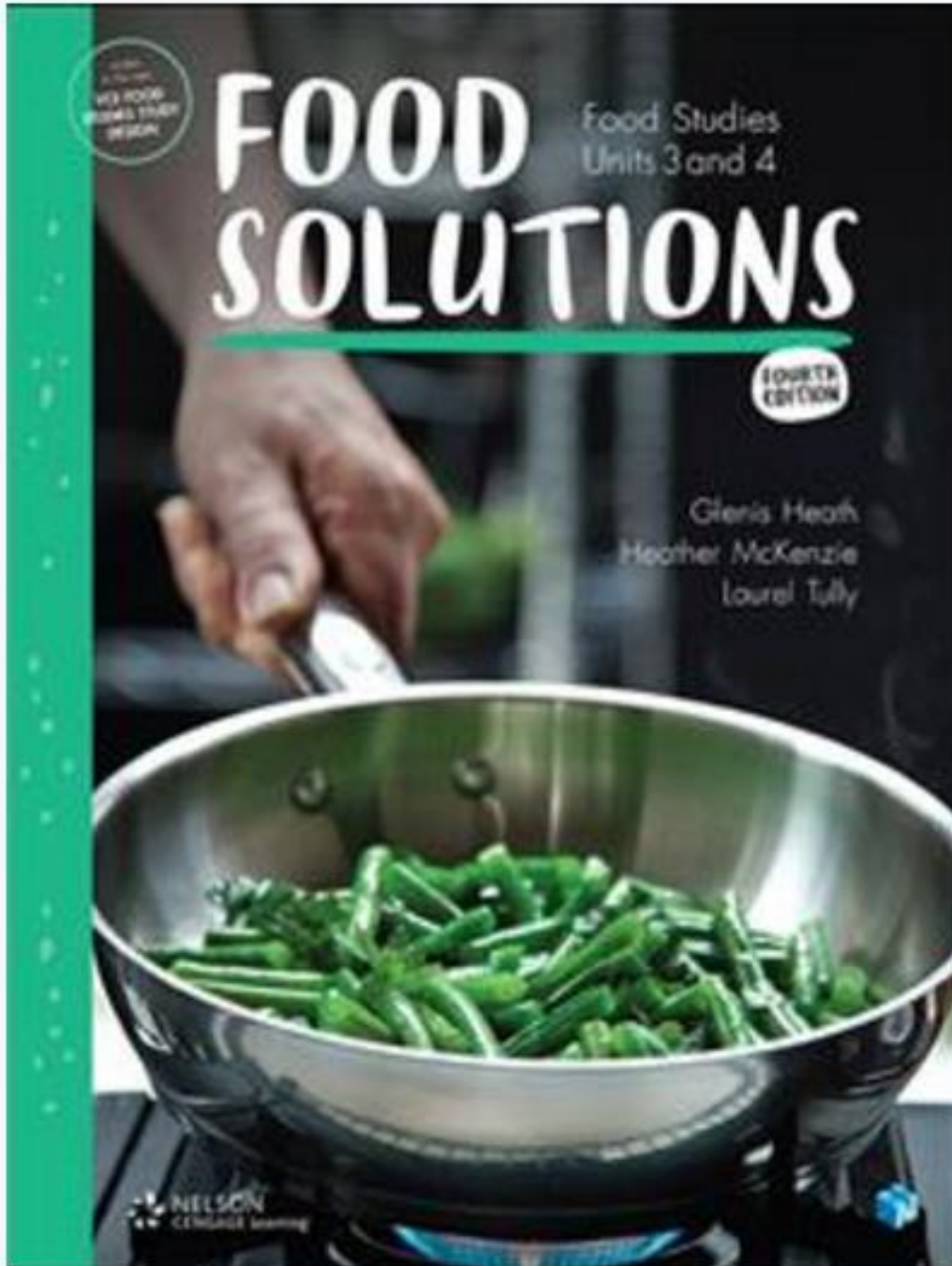
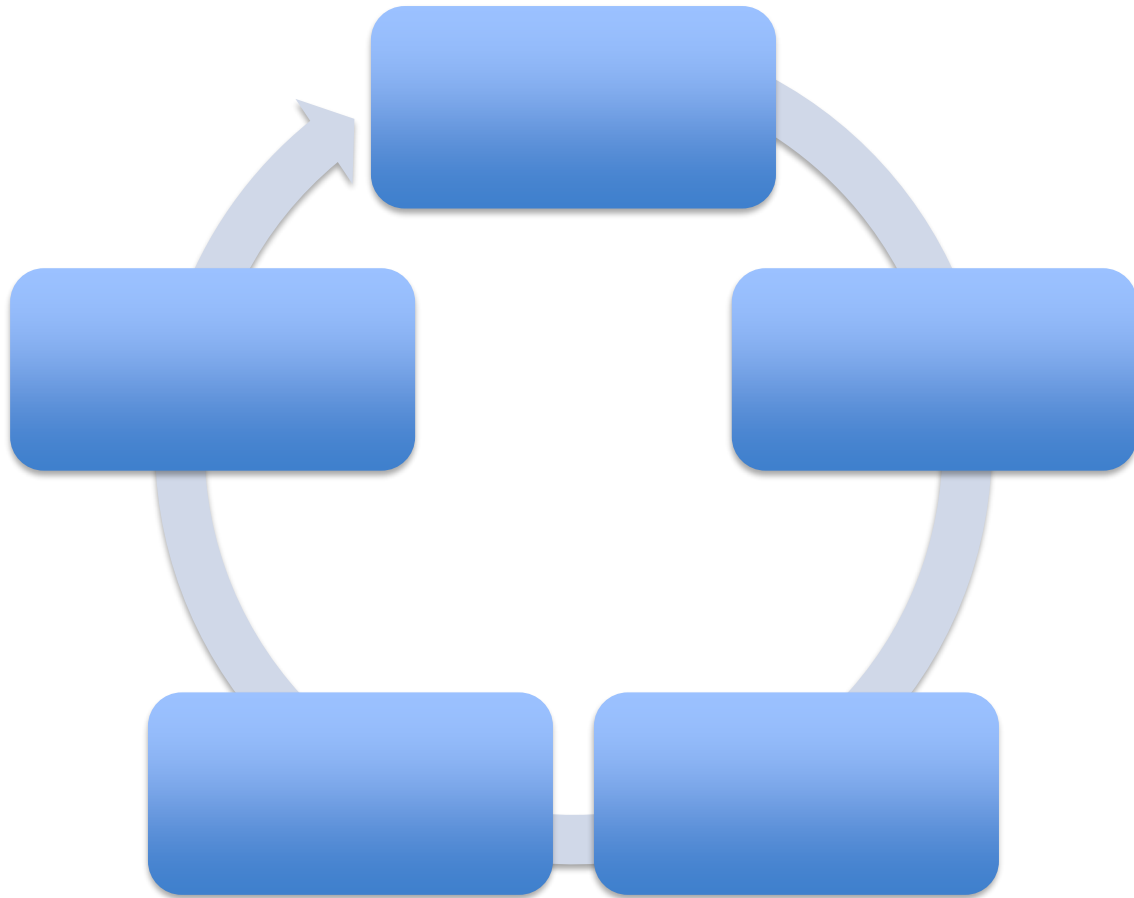


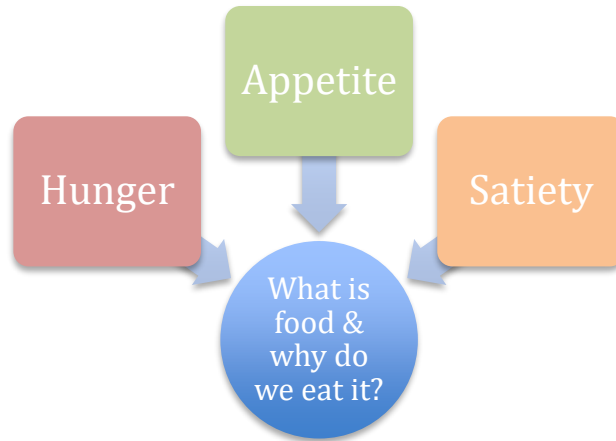
Holiday Homework Food Solutions (Food studies 3 & 4)
Chapter 1: Understanding the text



Name: _____

1. Fill in the diagram to demonstrate the factors associated with the sensation of hunger.





2. What is appetite and how does it influence the amount of food we eat?

3. How does hunger differ from appetite?

4. Explain what is meant by satiety.

5. Explain why the appearance of food influences our enjoyment of what we are about to eat.

6. Describe how we smell the different aromas of food. How does temperature affect the aroma of food?

7. Explain how we detect the flavour of food.



8. How is the umami taste different from the four major taste sensations?

9. Explain how we determine the texture of food.

10. List the four main stages of eating food.

| |
|----|
| 1. |
| 2. |
| 3. |
| 4. |

11. Explain the term “digestion”. Outline the differences between mechanical and chemical digestion.

Digestion:

| Mechanical Digestion | Chemical Digestion |
|----------------------|--------------------|
| | |

12. What is enzymatic hydrolysis?

13. Describe the digestive actions that occur when the brain receives the signals from the nose and eyes on seeing and smelling food.

14. Outline the role of the teeth, tongues and saliva in digestion after food is placed in the mouth.

| | |
|---------------|--|
| Teeth | |
| Tongue | |
| Saliva | |

15. Explain how food is assisted in its passage down the oesophagus.

16. Outline the chemical actions that take place when the food enters the stomach.

17. Describe the changes that occur to the following sugars in the small intestine.

- Sucrose
- Lactose
- Maltose

18. Explain the role of the liver in the digestive process.

19. Describe what happens to any indigestible matter once it enters the large intestine.

- 20. Explain the roles of microflora in the intestinal tract.**
- 21. Briefly explain where the absorption of nutrients takes place during digestion and how long this process takes.**
- 22. Explain how the structure of the villi assists the process of absorption of nutrients.**
- 23. Describe what happens when the villi are damaged. How does this affect the absorption process?**
- 24. What contribution of energy do carbohydrates make?**
- 25. Explain the term “glycaemic index” and its impact on satiety.**

26. Using the table below summarise the key information about types of carbohydrates.

| Monosaccharides | Disaccharides | Polysaccharides |
|-----------------|---------------|-----------------|
| | | |
| | | |
| | | |
| | | |
| | | |

27. Outline why resistant starch is valuable in the digestive process.

28. Explain why protein is a valuable macronutrient in the body.

29. Complete the following table.

| Protein type | Chemical make up | Food sources |
|--------------|------------------|--------------|
| Complete | | |
| Incomplete | | |

30. Explain the chemical make up of saturated fats. List four sources of saturated fats.

Preparing for Exams

Applying knowledge

Draw a flow chart to demonstrate the passage of food through the digestive tract.

Analysing information

Analyse each of the following macronutrients and describe the way they are absorbed and used in the body.

- Carbohydrates
- Protein
- Fats

Evaluating concepts

Rank the importance of hunger, appetite and satiety and the senses in determining an individual's food intake. Justify your ranking.