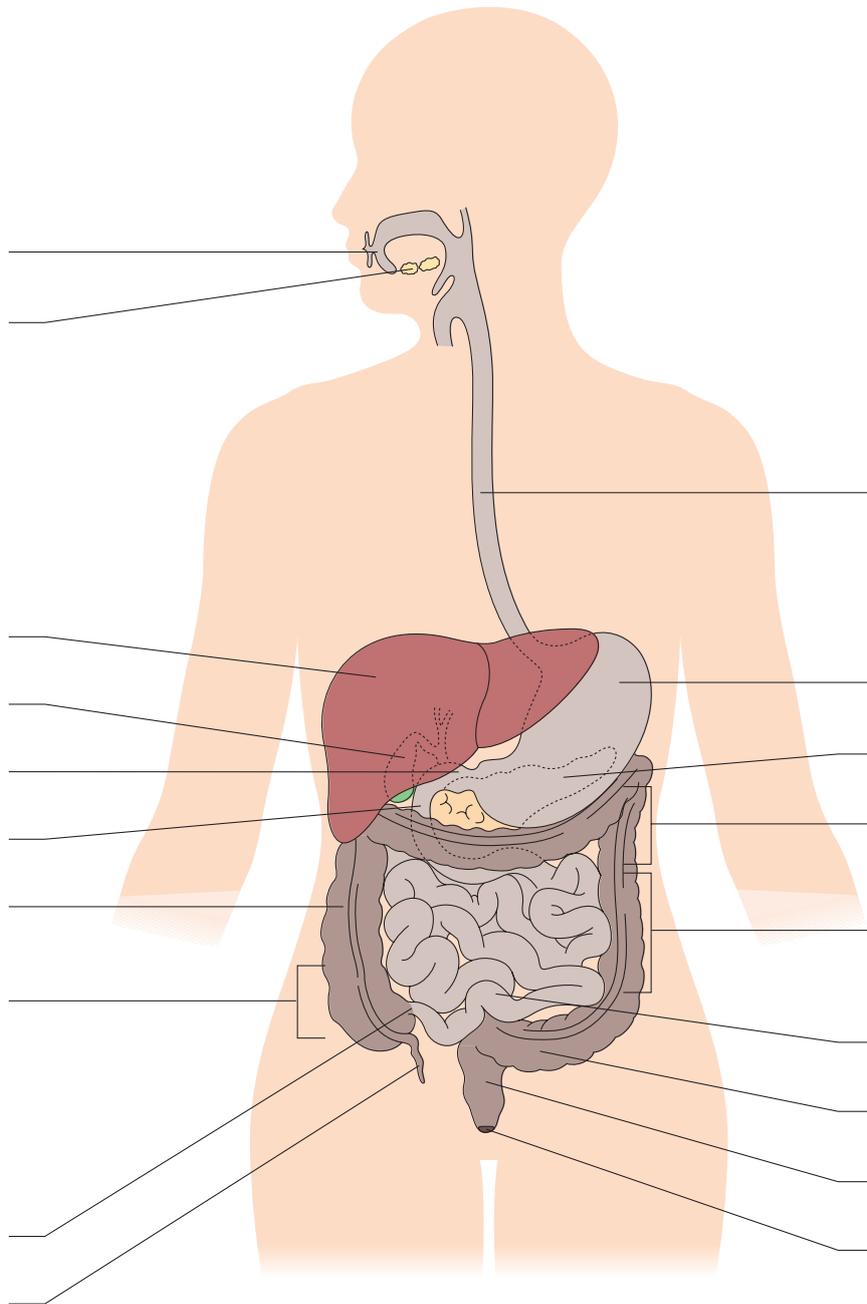


Activity I

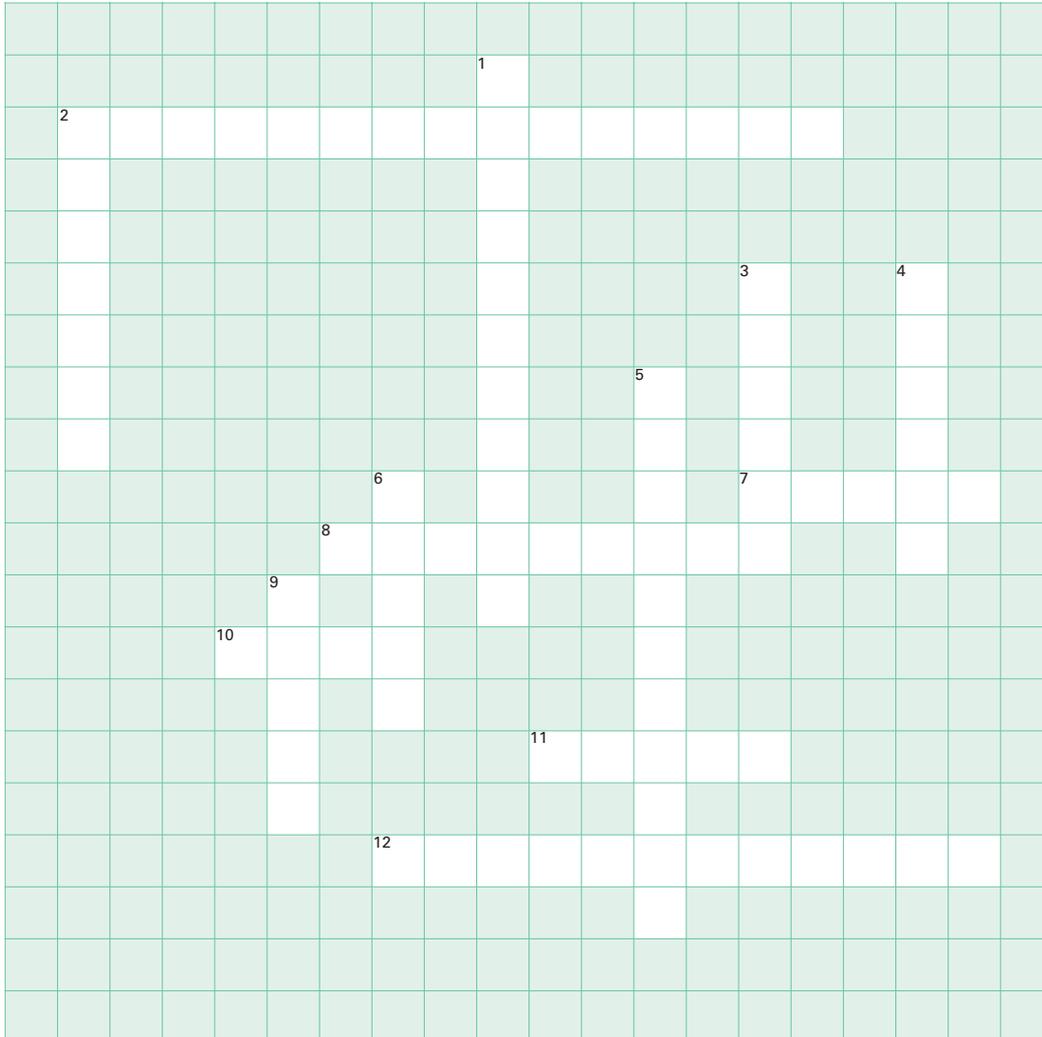
Label the following diagram of the digestive organs.

- | | | | |
|-----------------|------------|-------------------|------------------|
| Mouth | Stomach | Small intestine | Anal sphincter |
| Pancreas | Liver | Ileum | Duodenum |
| Salivary glands | Jejunum | Rectum | Caecum |
| Appendix | Colon | Oesophagus | Ileocaecal valve |
| Gall bladder | Anal canal | Pyloric sphincter | |



Activity 2

Complete the crossword.



Across

2. enzyme commencing carbohydrate digestion in mouth (8, 7)
7. part of small intestine where main absorption of food takes place
8. process of breaking down food
10. alkaline fluid associated with emulsification of fats
11. main part of large intestine
12. how digested food is used by tissues after absorption

Down

1. membranous bag on underside of liver (4, 7)
2. digestive organ that commences the digestion of protein
3. enzyme that starts breakdown of protein in stomach
4. faeces are stored here until defecation
5. rhythmical contractions of muscles in wall of alimentary canal
6. largest gland in body, accessory to digestion
9. network of capillaries in wall of small intestine

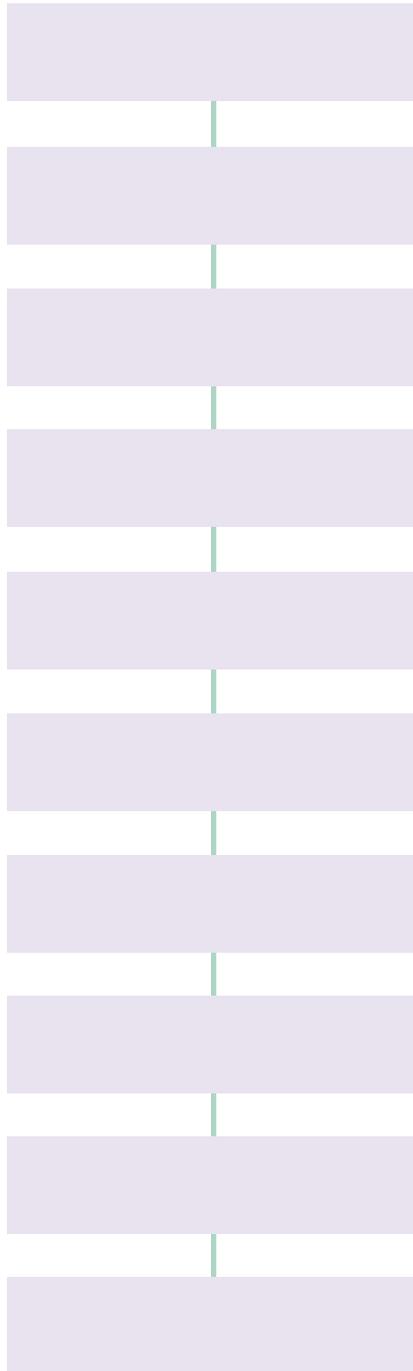
Activity 3

Put the following parts of the digestion system in the correct order for the process of digestion.

Anus
Colon
Duodenum
Ileum

Jejunum
Mouth
Oesophagus
Pharynx

Rectum
Stomach



Activity 4

Match the key words to the definitions in the box.

Sublingual

Acidic

Villi

Oesophagus

Alimentary canal

Gall bladder

Starch

Cardiac sphincter

Liver

Lipase

Key words	Definitions
	Pancreatic enzyme that digests fats
	Environment stomach provides for digestion
	Finger-like projections to facilitate absorption in the small intestine
	Digestive tract from mouth to anus
	Food type salivary amylase begins to break down
	Muscle guarding entry of food into stomach
	Small sac located posterior to liver
	Produces and secretes bile
	Salivary glands located in the lower part of the mouth on either side of the tongue
	Long narrow tube linking pharynx to stomach

Activity 5

Complete the following by filling in the blanks with the words listed below.

amino acids	fat	liver	peristalsis	small intestine
anus	gastric	mouth	protein	starch
bile	glucose	oesophagus	rectum	villi
chyme	intestinal	pancreatic	saliva	vitamins
faeces	lacteals	pepsin		

Digestion commences in the _____, where food is chewed by the teeth and mixed thoroughly with _____, which contains an enzyme called amylase which starts to digest _____.

Food then passes down the _____ to the stomach.

The food is then conveyed by a process of rhythmic muscular contractions called _____.

In the stomach the food is churned up and mixed with _____ juice which contains the enzyme _____ which starts to digest _____.

The food stays in the stomach for approximately five hours until it has been churned down into a liquid state called _____.

Food is then passed into the _____ where more enzymes continue the chemical breakdown of food.

The food is also mixed with _____, which is manufactured in the liver to help emulsify fat, _____ juice from the pancreas to continue the digestion of protein, carbohydrates, and _____ juice which completes the final breakdown of nutrients, including simple sugars to _____ and protein to _____.

The absorption of the digested food occurs by diffusion through the _____ of the small intestine, which are small, finger-like projections well supplied with blood capillaries.

_____ and minerals are absorbed in the blood capillaries and products of _____ digestion are absorbed into the intestinal lymphatics called the _____.

The capillaries join to form the hepatic portal vein which transports the digested food to the _____ to be regulated before being utilised by the body's tissues.

The undigested food passes into the colon where a large amount of water is absorbed.

The solid undigested matter, known as _____, passes into the _____ where it is stored before being passed out of the body through the _____.

Multiple-choice questions – Student book, p291

- 1. The alimentary tract is a long continuous muscular tube extending from**
 - a) mouth to anus
 - b) stomach to anus
 - c) small intestine to anus
 - d) large intestine to anus
- 2. Which of the following completes digestion?**
 - a) stomach
 - b) gall bladder
 - c) small intestine
 - d) large intestine
- 3. Which of the following statements is TRUE?**
 - a) The liver is situated in the upper left-hand side of the abdominal cavity
 - b) The liver's internal structure is made up of cells called hepatocytes
 - c) Bile is stored in the liver and released by the pancreas
 - d) When blood sugar levels are low, the liver cells store excess glucose
- 4. Which of the following is produced in the stomach?**
 - a) bile
 - b) pancreatic juice
 - c) pepsin
 - d) maltase
- 5. The commencement of protein digestion occurs in the**
 - a) mouth
 - b) small intestine
 - c) stomach
 - d) pancreas
- 6. Which of the following is responsible for the chemical reactions of digestion?**
 - a) homeostasis
 - b) enzymes
 - c) absorption
 - d) peristalsis
- 7. Salivary amylase commences**
 - a) carbohydrate digestion
 - b) protein digestion
 - c) fat digestion
 - d) vitamins and minerals digestion
- 8. The main constituents of gastric juice are**
 - a) gastrin and pepsin
 - b) gastrin and pepsinogen
 - c) pepsin, hydrochloric acid and mucus
 - d) gastric amylase
- 9. Trypsin is an enzyme produced by the**
 - a) duodenum
 - b) liver
 - c) pancreas
 - d) gall bladder
- 10. Where does peristalsis occur?**
 - a) only in the mouth
 - b) only in the small intestine
 - c) only in the stomach
 - d) in all sections of the alimentary canal
- 11. Vitamins and minerals are absorbed into the bloodstream**
 - a) via the liver cells
 - b) via the villi in the small intestine
 - c) via the lacteals in the small intestine
 - d) via the hepatic portal vein
- 12. The main part of the large intestine is the**
 - a) duodenum
 - b) colon
 - c) caecum
 - d) ileum
- 13. The three sections of the small intestine, from beginning to end, are**
 - a) ascending, transverse and descending
 - b) duodenum, jejunum and ileum
 - c) jejunum, ileum and duodenum
 - d) duodenum, ileum and jejunum
- 14. The colon primarily absorbs which substance?**
 - a) carbohydrates
 - b) proteins
 - c) fats and lipids
 - d) water