

Section 38–3 The Excretory System (pages 985–989)

This section identifies the organs of the excretory system. It also explains how the kidneys maintain homeostasis.

Functions of the Excretory System (page 985)

1. The process by which metabolic wastes are eliminated is called _____.
2. List the three organs that make up the excretory system.
 - a. _____
 - b. _____
 - c. _____
3. List three ways that the kidneys help maintain homeostasis.
 - a. _____
 - b. _____
 - c. _____

The Kidneys (pages 985–988)

4. Circle the letter of each sentence that is true about the kidneys.
 - a. They are the main organs of the excretory system.
 - b. They are located on either side of the spinal column.
 - c. They remove excess water and waste products from the urine.
 - d. They receive blood through the renal vein.

Match each term with its definition.

Term	Definition
_____ 5. ureter	a. Saclike organ where urine is stored
_____ 6. urinary bladder	b. Functional unit of the kidney
_____ 7. renal medulla	c. Outer part of the kidney
_____ 8. renal cortex	d. Tube that carries urine from the kidney to the urinary bladder
_____ 9. nephron	e. Inner part of the kidney

10. Is the following sentence true or false? Nephrons are located in the renal medulla.

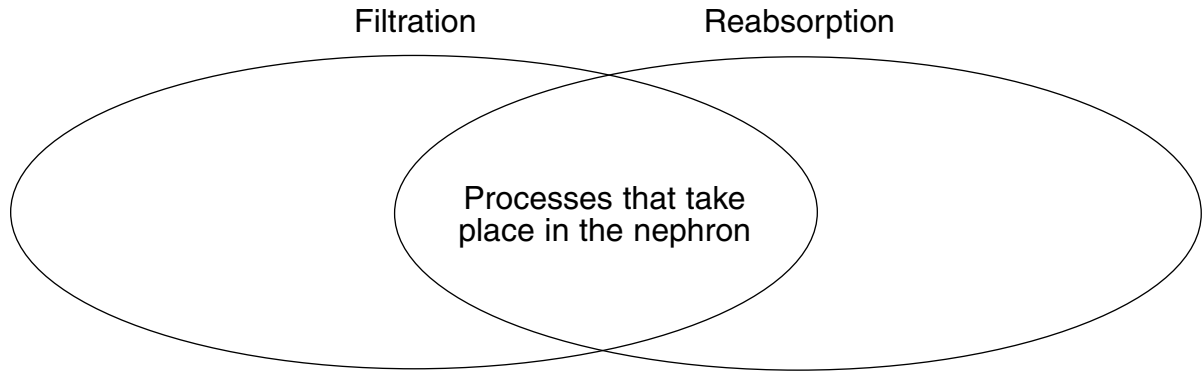
11. What ends up in the collecting duct? _____

12. List the two processes involved in blood purification.
 - a. _____
 - b. _____

13. The small network of capillaries in the upper end of the nephron is referred to as the _____.

14. The glomerulus is enclosed by a cup-shaped structure called the _____.

15. Complete the Venn diagram.



16. The materials that are filtered from the blood are collectively called the _____.

17. List six materials that are filtered from blood.

- a. _____ c. _____ e. _____
b. _____ d. _____ f. _____

18. Which substances are removed from the filtrate and reabsorbed by the capillaries?

19. What happens during the process of secretion? _____

20. Circle the letter of each sentence that is true about urine.

- a. It is the material that remains after reabsorption.
b. It contains only urea and water.
c. It is concentrated in the loop of Henle.
d. It is released from the body through the urethra.

Control of Kidney Function (page 988)

21. How are the activities of the kidneys controlled? _____

22. Is the following sentence true or false? As the amount of water in the blood increases, the rate of water reabsorption in the kidneys increases. _____

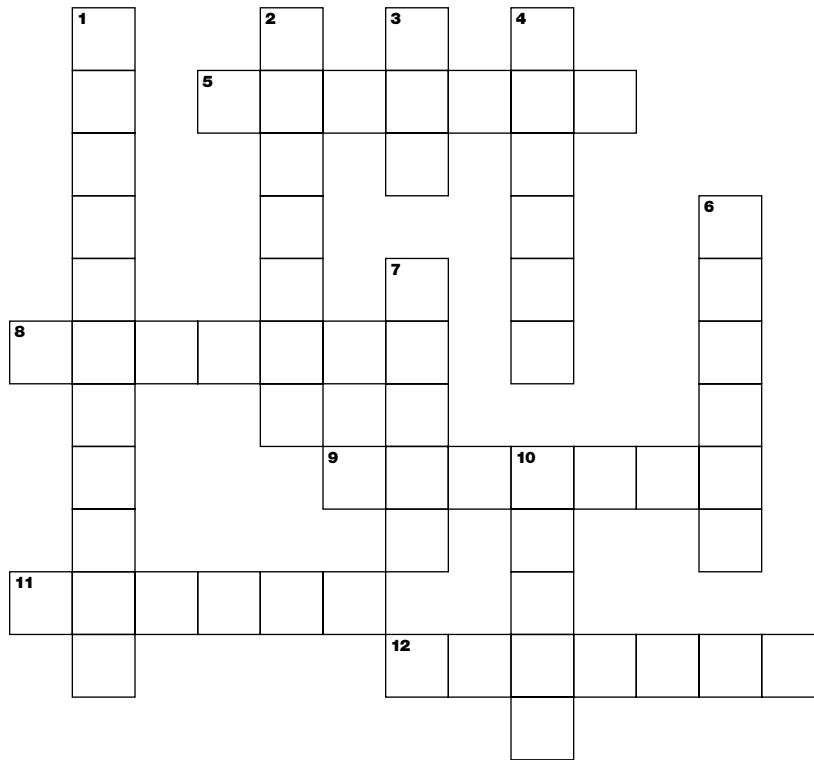
Homeostasis by Machine (pages 988–989)

23. Is the following sentence true or false? Humans cannot survive with only one kidney.

24. The removal of wastes from blood using a machine is called _____.

WordWise

Test your knowledge of vocabulary terms from Chapter 38 by completing this crossword puzzle.



Clues down:

1. Muscular contractions of the esophagus
2. Inorganic nutrient needed in small amounts
3. Lipid
4. Main organ of excretion
6. Tube that carries fluid from kidney to bladder
7. Mixture of stomach fluids and food
10. Gland that produces bile

Clues across:

5. Organic molecule that helps regulate body processes
8. Large muscular sac important in digestion
9. Enzyme in saliva that helps digest starch
11. Projection from the wall of the small intestine
12. Tube through which urine is released from the body