


Section 39–2 Human Endocrine Glands (pages 1003–1008)

 **TEKS FOCUS:** 10A Function of the endocrine system; 11A Internal feedback and maintenance of homeostasis; **TEKS SUPPORT:** 11C Importance of nutrition to health

This section describes the functions of the major endocrine glands.

Introduction (page 1003)

1. List seven major glands of the endocrine system.

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

Pituitary Gland (page 1003)

2. Describe the pituitary gland and its location. _____

3. List the two parts of the pituitary gland.

- | | |
|----------|----------|
| a. _____ | b. _____ |
|----------|----------|

4. In general, what is the role of pituitary gland hormones? _____

Hypothalamus (page 1004)

5. Is the following sentence true or false? The hypothalamus controls the secretions of the pituitary gland. _____

6. What influences the activity of the hypothalamus? _____

7. In what way is the posterior pituitary an extension of the hypothalamus?

8. Is the following sentence true or false? The hypothalamus has direct control of the anterior pituitary. _____

Match each pituitary hormone with its action.

Hormone	Action
_____ 9. ADH	a. Stimulates ovaries and testes
_____ 10. FSH	b. Stimulates production of eggs and sperm
_____ 11. LH	c. Stimulates release of hormones from adrenal cortex
_____ 12. GH	d. Stimulates protein synthesis and growth in cells
_____ 13. ACTH	e. Stimulates the kidneys to reabsorb water

14. What are releasing hormones, and what do they do? _____

Thyroid Gland (page 1005)

15. Where is the thyroid gland located? _____

16. Is the following sentence true or false? The thyroid gland regulates reproduction.

17. List the two hormones produced by the thyroid.
a. _____ b. _____
18. What does thyroxine do in the body? _____

19. Production of too much thyroxine leads to a condition called _____.
20. Circle the letter of each choice that is a symptom of too much thyroxine.
a. nervousness b. weight loss c. lack of energy d. goiter
21. An enlargement of the thyroid gland is called a(an) _____.
22. Infants who lack enough iodine to produce normal amounts of thyroxine suffer from a condition called _____.
23. How can cretinism usually be prevented? _____

Parathyroid Glands (page 1005)

24. How does parathyroid hormone regulate calcium levels in the blood? _____

Adrenal Glands (page 1006)

25. What is the general role of the adrenal glands? _____

26. The outer part of the adrenal gland is called the _____, and the inner part is called the _____.
27. Is the following sentence true or false? The release of hormones from the adrenal medulla is regulated by the sympathetic nervous system. _____

28. Complete the table about adrenal gland hormones.

HORMONES OF THE ADRENAL GLAND

Part of Adrenal Gland	Hormones It Produces	Role of the Hormones
	Corticosteroids	Regulating minerals, metabolism
Adrenal medulla		

Pancreas (pages 1007–1008)

29. Is the following sentence true or false? The pancreas is both an endocrine gland and an exocrine gland. _____

30. What is the role of insulin and glucagon? _____

31. When the pancreas fails to produce or properly use insulin, a condition known as _____ occurs.

32. Is the following sentence true or false? Type I diabetes usually develops in people before the age of 15. _____

33. Circle the letter of each sentence that is true about Type II diabetes.

- a. It most commonly develops before age 40.
- b. Type II diabetics produce low to normal amounts of insulin.
- c. It is also called juvenile-onset diabetes.
- d. It is an autoimmune disorder.

Reproductive Glands (page 1008)

34. List the two important functions served by the gonads.

- a. _____
- b. _____

35. The female gonads are the _____, and the male gonads are the _____.

Reading Skill Practice

Taking notes can help you identify and remember the most important information in a section. Take notes on Section 39–2 by writing the main headings and under each heading listing the most important points. Do your work on a separate sheet of paper.