

Name \_\_\_\_\_

Date \_\_\_\_\_ Score \_\_\_\_\_

## ASSIGNMENT SHEET

### CHAPTER 11: ANATOMY AND PHYSIOLOGY OF THE HUMAN BODY

#### Unit 12: The Endocrine System

#### WORDS TO KNOW CHALLENGE

##### A. Word Search: Find the following words hidden in the puzzle.

ACROMEGALY  
ADRENAL  
ADRENALINE  
ALDOSTERONE  
CRETINISM  
DWARFISM  
ENDOCRINE

ESTROGEN  
EXOCRINE  
GIANTISM  
GLAND  
GOITER  
GONAD  
HORMONE

OVARY  
PINEAL  
PITUITARY  
PUBERTY  
TESTES  
TETANY  
THYMUS

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R I O G O N A D A W T D C
A C R O M E G A L Y U E P
V D I I W E S D D L T I U
M N R T E S T R O G E N B
C T W E Q Z C E S V T H E
E R E R N I O N T P A O R
N G E S T A L A E I N R T
D L I T T E L L R T Y M Y
O A E A I E C I O U P O T
C N E R N N S N N I I N H
R D O W Q T I E E T N E Y
I D W A R F I S M A E I M
N K L V C O P S M R A E U
E X O C R I N E M Y L W S
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##### B. Define the following Words to Know using the Glossary.

- Adrenaline \_\_\_\_\_
- Diabetes mellitus \_\_\_\_\_
- Estrogen \_\_\_\_\_
- Gonad \_\_\_\_\_
- Hormone \_\_\_\_\_
- Hypoglycemia \_\_\_\_\_
- Ovary \_\_\_\_\_
- Progesterone \_\_\_\_\_
- Testes \_\_\_\_\_
- Testosterone \_\_\_\_\_

**UNIT REVIEW**

**A. Short Answer**

1. Explain the difference between an exocrine gland and an endocrine gland, giving an example of each.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. What types of body functions are affected by hormones?

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

3. List the nine glands discussed in the unit, identifying the location of each gland.

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

d. \_\_\_\_\_

e. \_\_\_\_\_

f. \_\_\_\_\_

g. \_\_\_\_\_

h. \_\_\_\_\_

i. \_\_\_\_\_

4. Identify the hormones secreted by the gonads and the functions of each.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. What hormone secretion abnormality causes the following conditions?

a. Giantism/Gigantism \_\_\_\_\_

b. Dwarfism \_\_\_\_\_

c. Acromegaly \_\_\_\_\_

d. Goiter \_\_\_\_\_

e. Tetany \_\_\_\_\_

f. Diabetes \_\_\_\_\_

g. Cretinism \_\_\_\_\_

h. Cushing's syndrome \_\_\_\_\_

i. Myxedema \_\_\_\_\_

6. What diagnostic examinations are used to confirm the following conditions?

a. Diabetes \_\_\_\_\_

b. Thyroid dysfunction \_\_\_\_\_

c. Pregnancy \_\_\_\_\_

d. Cushing's syndrome \_\_\_\_\_

7. List the symptoms and characteristics in the following conditions or diseases.

- a. Cushing's syndrome \_\_\_\_\_
- b. Diabetes mellitus \_\_\_\_\_
- c. Myxedema \_\_\_\_\_

8. What role does insulin play in the blood?

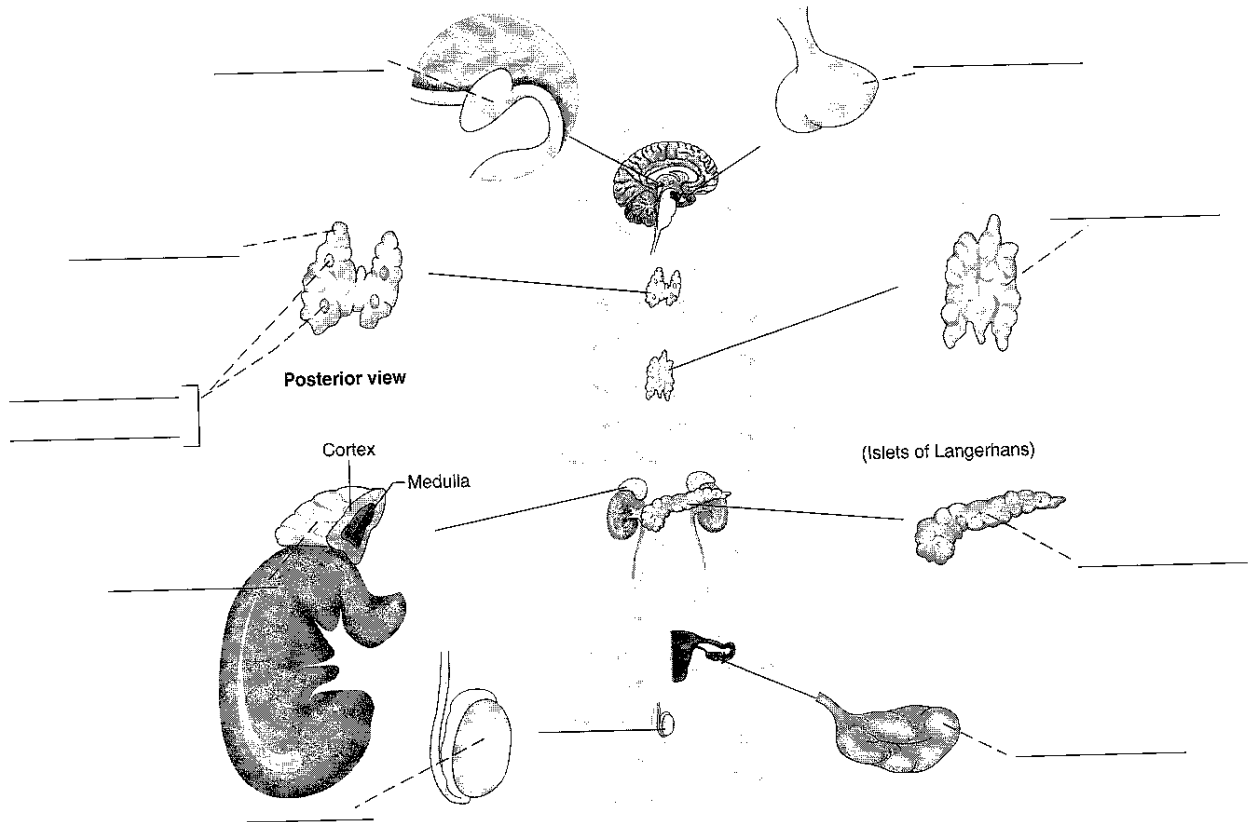
- a. \_\_\_\_\_
- b. \_\_\_\_\_

**B. Fill in the Blank**

1. Type 2 diabetes usually begins because of \_\_\_\_\_.
2. With diabetes, the body's cells resist both \_\_\_\_\_ and \_\_\_\_\_.
3. Insulin resistance can also result from \_\_\_\_\_, \_\_\_\_\_, and some medications, but \_\_\_\_\_ and a \_\_\_\_\_ are the main nongenetic factors.

**C. Label the Illustration**

Identify the endocrine glands on the following illustration.



**D. Complete the Chart: Briefly identify the function(s) of the hormones from the following glands. (This will help you realize how the glands regulate the body. Many modern drugs stimulate or mimic hormones to affect body function.)**

Glands	Function
Pituitary: Anterior Lobe a. GH b. TSH  c. ACTH  d. MSH e. FSH  f. LH  g. PR	a. _____ b. _____ c. _____ d. _____ e. _____ f. _____ g. _____
Pituitary: Posterior Lobe a. Oxytocin  b. ADH	a. _____ b. _____
Thyroid a. T4 and T3  b. Throcalcitonin	a. _____ b. _____
Parathyroid a. Parathormone	a. _____
Adrenal Cortex a. Alsosterone  b. Glucocorticoids  c. Sex steroids (Androgens)	a. _____ b. _____ c. _____

Medulla a. Adrenaline	a. _____ _____
Pancreas a. Insulin  b. Glucagon	a. _____ _____ b. _____ _____
Thymus a. Peptides	a. _____

**CASE STUDIES**

**Scenario 1**

A new patient calls to see when he can get an appointment. His chief complaints are that he has no energy and that he is always thirsty, which of course causes him to drink a lot, which in turn causes him to make frequent visits to the bathroom. He says it is interfering with his sleep, which is why he thinks he is so tired. He is 65 years old, so he thinks he is just having prostate problems, which could be also causing the urinary problems. He says he can wait a while for an appointment; he doesn't think it is anything serious.

**Critical Thinking Questions**

1. Why do you need to determine when his symptoms began? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
2. Why would a family history of diabetes be important to know? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
3. Why should you determine if he has ever had a problem with bleeding excessively when injured or with a dental or surgical procedure. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Scenario 2**

You run into an old friend whom you haven't seen in 15 years. After talking for a while, you notice she is very nervous and her eyes seem quite pronounced. She is also a lot thinner than you remember her being. When you ask her how she has been feeling, she says, "Not too great."

**Critical Thinking Questions**

1. How could you question her more? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

2. What makes you think she might have a medical problem? \_\_\_\_\_

\_\_\_\_\_

3. Why should you be concerned if she is ill? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### CERTIFICATION AND REGISTRATION PREPARATION

- \_\_\_\_\_ 1. An endocrine gland:
- a. secretes substances into the bloodstream
  - b. secretes substances into a duct
  - c. secretes substances into the Lymph vessels
  - d. secretes substances into the stomach
- \_\_\_\_\_ 2. All of these statements are true except:
- a. insulin is secreted by the islets of Langerhans
  - b. hyperglycemia refers to too much insulin
  - c. insulin is an endocrine secretion from the pancreas
  - d. insulin is necessary to metabolize carbohydrates
- \_\_\_\_\_ 3. Which of the following statements is not true?
- a. Type I diabetes is called juvenile diabetes.
  - b. Type 2 diabetes develops from insulin resistance.
  - c. Type 1 diabetes is an autoimmune disease.
  - d. Hypoglycemia is the main symptom of diabetes.
- \_\_\_\_\_ 4. The following statements about the thymus gland are true except:
- a. it gets smaller as we age
  - b. it causes certain T cells to mature
  - c. it is located in the brain
  - d. it produces peptides
- \_\_\_\_\_ 5. Progesterone is a hormone secreted by the:
- a. ovaries
  - b. testes
  - c. pituitary gland
  - d. pineal gland
- \_\_\_\_\_ 6. A test that measures glucose levels of four to six weeks is:
- a. glucose tolerance
  - b. human chorionic gonadotropin
  - c. fasting blood sugar
  - d. glucohemoglobin
- \_\_\_\_\_ 7. A moon face and a buffalo hump are symptoms of:
- a. Addison's disease
  - b. Graves' disease
  - c. Mxedema
  - d. Cushing's syndrome
- \_\_\_\_\_ 8. Enlarged thyroid, nervousness, and weight loss are symptoms of:
- a. Addison's disease
  - b. Graves' disease
  - c. Mxedema
  - d. Cushing's disease
- \_\_\_\_\_ 9. The following are symptoms of hypoglycemia except:
- a. nervousness
  - b. paleness
  - c. full bounding pulse
  - d. dry skin
- \_\_\_\_\_ 10. Escalated hyperthyroidism may develop into:
- a. cardiomegaly
  - b. generalized paralysis
  - c. exophthalmus
  - d. a thyroid storm