READING NOTES CHAPTER 13: ENDOCRINE SYSTEM

**Name \_\_\_\_\_\_\_\_\_\_\_\_**

**Period \_\_\_\_\_\_\_\_\_\_\_**

**Introduction (p. 488)**

The endocrine system is named because the tissues secrete substances into the \_\_\_\_\_\_\_\_\_\_\_ environment. These substances are called \_\_\_\_\_\_\_\_\_\_ and diffuse from the tissues into the bloodstream, eventually acting on specific cells called \_\_\_\_\_\_\_\_\_ cells. Sometimes these secretions act to speed up a cells actions, other times they act to slow the actions down. The “blood chemist” that monitors and essentially controls this elaborate system is the **hypothalamus**. It primarily secretes hormones that ask for the **release** of hormones or it asks to **inhibit** the release of hormones.

For the following glands, take note of what hormones they release. Refer to the cited pages to write out the basic function as well as what causes the release and/or inhibition of secretion (in some cases both) of each of the hormones in the spaces provided:

**Anterior pituitary gland (pages 497 – 502)**

**Growth hormone (GH):**

**Function –**

**Cause for release –**

**Cause for inhibiting release -**

**Prolactin (PRL):**

**Function –**

**Cause for inhibiting release -**

**Thyroid-stimulating hormone (TSH):**

**Function –**

**Cause for release –**

**Adrenocorticotropic hormone (ACTH):**

**Function –**

**Cause for release –**

**Follicle-stimulating and luteinizing hormones (FSH & LH):**

**Function –**

**Cause for release –**

**Cause for inhibiting release -**

**Posterior pituitary gland (pages 502 – 503)**

**Antidiuretic hormone (ADH):**

**Function –**

**Cause for release –**

**Cause for inhibiting release -**

**Oxytocin (OT):**

**Function –**

**Cause for release –**

**Cause for inhibiting release -**

**Thyroid gland (pages 504 – 505)**

**Thyroxine (T3 and T4 hormones):**

**Function –**

**Cause for release –**

**Cause for inhibiting release -**

**Calcitonin:**

**Function –**

**Cause for release –**

**Cause for inhibiting release -**

**Parathyroid glands (pages 506 – 508)**

**Parathyroid hormone (PTH):**

**Function –**

**Cause for release –**

**Cause for inhibiting release -**

**Adrenal glands – medulla (pages 509 – 510)**

**Epinephrine & norepinephrine:**

**Function –**

**Cause for release –**

**Cause for inhibiting release -**

**Adrenal glands – cortex (pages 510 – 512)**

**Aldosterone:**

**Function –**

**Cause for release –**

**Cause for inhibiting release -**

**Cortisol:**

**Function –**

**Cause for release –**

**Cause for inhibiting release -**

**Androgens (which can be converted into estrogen):**

**Function –**

**Cause for release –**

**Cause for inhibiting release -**

**Pancreas (pages 513 – 515)**

**Glucagon:**

**Function –**

**Cause for release –**

**Cause for inhibiting release -**

**Insulin:**

**Function –**

**Cause for release –**

**Cause for inhibiting release -**

**Pineal gland (page 515)**

**Melatonin (which is derived from serotonin):**

**Function –**

**Cause for release –**

**Cause for inhibiting release –**

**Thymus (page 516)**

**Thymosins:**

**Function –**

**Cause for release –**

**Cause for inhibiting release -**

**Testes (page 516, pages 836 - 837)**

**Testosterone:**

**Function –**

**Cause for release –**

**Cause for inhibiting release -**

**Ovaries (page 516, page 848)**

**Estrogen & progesterone:**

**Function –**

**Cause for release –**

**Cause for inhibiting release -**