* **Endocrine System**
* **Function of the Endocrine System –** to secrete\_\_\_\_\_\_\_\_\_\_\_\_\_– chemical \_\_\_\_\_\_\_\_\_\_\_\_that coordinate and direct \_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_
* **ENDOCRINE GLANDS**: Secrete hormones directly into bloodstream; \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Control the \_\_\_\_\_\_of certain chemical reactions
  + Transports \_\_\_\_\_\_\_\_\_\_across cell membranes
  + Helps \_\_\_\_\_\_\_\_\_\_water and electrolyte balances
  + Play a vital role in\_\_\_\_\_\_\_\_\_\_\_, development, and \_\_\_\_\_\_\_\_\_\_\_\_\_
* **EXOCRINE GLANDS –** secrete substancesthrough a \_\_\_\_\_\_\_\_\_\_(sweat, salivary, lacrimal and pancreas)
* Hormonal control ---**NEGATIVE FEEDBACK**

1. Drop in hormone level triggers a chain reaction to increase secretion, for example
   1. Blood level \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Brain gets message and sends out \_\_\_\_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_
   3. Gland stimulates more \_\_\_\_\_\_\_\_\_\_\_\_\_
   4. When blood levels of hormone\_\_\_\_\_\_\_\_\_\_\_\_, the brain hormones stop

* **PITUITARY GLAND**: Tiny structure the size \_\_\_\_\_\_\_\_\_\_\_\_
* Located at the base\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Connected to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Divided into \_\_\_\_\_\_\_\_\_ and posterior lobes
* The “\_\_\_\_\_\_\_\_\_\_\_\_Gland”
* **Anterior Pituitary Lobe**
* GROWTH HORMONE – GH (SOMATOTROPIN) responsible for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* PROLACTIN – develops breast tissue, stimulates production of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* THYROID-STIMULATING HORMONE – TSH - stimulates thyroxine
* ADRENOCORTICOTROPIC HORMONE – ACTH – stimulates \_\_\_\_\_\_\_\_\_\_\_\_ cortex
* FOLLICLE-STIMULATING HORMONE – FSH - stimulates growth of graafian follicle and production of \_\_\_\_\_\_\_\_\_ in females, \_\_\_\_\_\_\_\_\_\_\_\_ in males
* LUTEINIZING HORMONE – LH – stimulates \_\_\_\_\_\_\_\_\_\_ and formation of corpus luteum, which produces progesterone in females
* **Posterior Pituitary Lobe**
* VASOPRESSIN – converts to ADH (antidiuretic hormone) in the bloodstream, acts on kidney to concentrate \_\_\_\_\_\_\_\_ and preserve \_\_\_\_\_\_\_\_\_\_ in the body
* OXYTOCIN – released during childbirth causing \_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the uterus
* **THYROID GLAND** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ shaped mass of tissue, On either side of \_\_\_\_\_\_\_\_\_, over trachea
* H-shaped/ Main hormone – THYROXINE – is controlled by the secretion of TSH
* Thyroxine controls the rate of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* CALCITONIN – controls calcium ion concentration in the body, prevents hypercalcemia
* **PARATHYROID GLANDS** Four glands, each the size of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Attached to posterior thyroid…. Produce PARATHORMONE which helps control blood calcium level, prevents hypocalcemia
* **THYMUS**…. Endocrine gland and lymphatic organ
* Located behind the \_\_\_\_\_\_\_\_, above and in front of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Begins to disappear at \_\_\_\_\_\_\_\_\_

**ADRENAL GLANDS** Located on top of each \_\_\_\_\_\_\_\_\_\_\_\_

* Adrenal cortex secretes hormones known at corticoids – they are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* They are: mineralcorticoids, glucocorticoids, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_are male sex hormones
* Adrenal medulla secretes epinephrine (adrenaline) and norepinephrine
* ADRENALINE is a powerful cardiac stimulant – “fight or flight” hormones that prepare the body for an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**GONADS** Ovary in female…. Testes in male

* Estrogen – development of female reproductive organs, secondary sex characteristics
* Progesterone – plays a part in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Testosterone – male reproductive organs and secondary sex characteristics
* **PANCREAS** Located behind the\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_; Endocrine and exocrine functions
  + Involved in production of INSULIN by ISLETS OF LANGERHANS
* \_\_\_\_\_\_\_\_\_\_\_\_ promotes utilization of glucose by the cells, fatty acid and amino acid transport, and facilitates protein synthesis