**Guided Notes: Homeostasis (Outcome 21)**

**Biology 12 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**



The endocrine system \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ hormones that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ all biological \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

The nervous system \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the body by communicating \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Together these \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ regulate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Homeostasis**

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = when the organ systems of the body work together to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ a relatively \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, stable \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ environment despite the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ conditions.
* If this cannot occur the \_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and body systems can start to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ down.



* Homeostasis is regulated through \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ loops. Most are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ loops but some can be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ loops.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ loops \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the effect.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ loops turns \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at a \_\_\_\_\_\_\_\_\_\_-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Negative Feedback Loop: Hormone Regulation**

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| **Stimulus** | Produces \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in variable. |
| **Receptor** | Detects the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ change (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_). |
| **Control Centre** | The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ gland releases its own \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ hormone for another \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to respond to the receptor. |
| **Effector** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the control centre. |
| **Response** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the stimulus. |
| **Homeostasis** | The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ becomes in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and turns off the feedback loop. |

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\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ gland releases its own \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ hormone for another \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to do so.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ detects variable \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and sends a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the form of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ hormone.

**Inhibition**

**Example: Thyroxine**