**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hr. \_\_\_**

**NOTES: Chapter 4 Evolution**

**The Theory of Evolution**

* **English scientist \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ is considered the \_\_\_\_\_\_\_\_\_\_\_\_ of modern evolutionary \_\_\_\_\_\_\_\_\_\_\_\_.**

**---- \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ----- a \_\_\_\_\_\_\_\_\_\_\_\_ in which a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ selects particular \_\_\_\_\_\_\_\_.**

**---- \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ----- nature \_\_\_\_\_\_\_\_ organisms with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for a particular environment \_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and pass on \_\_\_\_\_\_ to the next \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**Artificial Selection**

* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_ influences on \_\_\_\_\_\_\_ of populations**

**---- Plants-\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, etc.**

**---- Animals-\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_, etc.**

**---- Resistance-\_\_\_\_\_\_\_\_\_\_\_\_/antibiotic**

* + - **Physiological Adaptations…….can be rapid**

**Natural Selection**

* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ produce \_\_\_\_\_\_ than can \_\_\_\_\_\_\_\_\_\_\_\_**
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is \_\_\_\_\_\_\_\_\_, limited \_\_\_\_\_\_\_\_\_\_\_\_\_**
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ differ in \_\_\_\_\_\_\_\_\_\_\_\_**
* **Some \_\_\_\_\_\_\_\_\_\_\_\_\_\_ traits provide \_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* **Each \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ generation contains proportionately \_\_\_\_\_\_\_\_ organisms with \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_**

**Defining Evolution**

* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_----gradual \_\_\_\_\_\_\_ over \_\_\_\_\_\_\_; evolution is an \_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_ process of \_\_\_\_\_\_\_\_\_\_ mutations and \_\_\_\_\_\_\_\_\_\_\_\_ selection.**

**---- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ --- \_\_\_\_\_\_\_\_\_\_ variations that occur in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ over time.**

**---- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ --- the emergence of \_\_\_\_\_\_\_\_\_\_\_\_ innovations or the \_\_\_\_\_\_\_\_\_\_\_\_ development of \_\_\_\_ structures (like \_\_\_\_\_\_\_ ), new organs (like\_\_\_\_\_\_ ), and body \_\_\_\_\_\_\_(like the origin of insects and birds).**

**The \_\_\_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_, to \_\_\_\_\_\_, to \_\_\_\_\_\_\_\_ evolution.**

**Adaptations**

* **\_\_\_\_\_ variation that \_\_\_\_\_ an organism’s \_\_\_\_\_\_\_\_ of survival in its environment**
* **Examples:**
  + **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
  + **\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
  + **\_\_\_\_\_\_\_\_\_\_\_**
  + **\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Other Evidence**

* **\_\_\_\_\_\_\_\_\_\_\_\_**
* **\_\_\_\_\_\_\_\_\_\_\_\_**

**---- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ structures**

**---- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ structures**

**---- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ structures**

* **\_\_\_\_\_\_\_\_\_\_\_\_**
* **\_\_\_\_\_\_\_\_\_\_\_\_**

**Mechanisms of Evolution**

* **Population \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**--- \_\_\_\_\_\_ frequency**

**--- \_\_\_\_\_\_\_\_\_\_ equilibrium**

* **Changes in Genetic Equilibrium**

**--- Any \_\_\_\_\_\_\_ that \_\_\_\_\_\_\_ allelic frequency**

**Types of Selection**

* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_--- favors the \_\_\_\_\_\_\_\_\_\_\_\_**
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_--- favors one \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_---favors both \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Evolution of Species**

* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ---- evolution of new speces**
* **Geographic \_\_\_\_\_\_\_\_\_\_\_**
* **Reproductive \_\_\_\_\_\_\_\_\_\_\_**
* **Gradualism ---species originate through \_\_\_\_\_\_\_\_ series of \_\_\_\_\_\_\_\_\_\_\_**

**TURN INTO THE BOX FOR A GRADE.**