

\*\*\* As you complete each lesson copy these guided notes into your Composition Book  
You may need to use your book to find the definitions of vocabulary and complete some statements. Page numbers are provided to assist you.

## Ch. 11-1 Darwin's Theory

Big Question: How do lifeforms change over time?

1831- Charles Darwin set sail on the British Ship HMS Beagle. On the voyage the ship was stranded in the Galapagos Island for some time.

As the ship's naturalist Darwin studied the new species and the new fossils he discovered he made many comparisons to species he was familiar with.

**Species** (def p.375)

### Galapagos Finch Study

- Darwin noticed that birds were different from one island to the next.
- He concluded they all began with the same ancestor and had changed or adapted to changes in their environment.

**Adaptation** (def p. 377)

**Evolution** (def p.378)

Darwin hypothesized that species change over many generations and become better adapted to new conditions.

**Scientific Theory** (def p.378)

**Natural Selection** (def p. 380)

Natural selection causes:

1. Overproduction species that produce far more offspring than can survive.  
\*Some are better equipped to survive because of variations.

**Variation** - (def p. 381)

2. Variation causes competition
3. Competition leads to the best suited to survive and pass their genes on to the next generation.

(P. 381)

Darwin proposed that over a long time, natural selection can lead to change. Helpful variations accumulate in a species. While unfavorable ones may disappear.

Last sentence of text (p. 382)

Only traits that are inherited, or controlled by genes that are passed on to offspring, can be acted upon by Habitual selection.

See example of Monkey Flowers fig 6.

### **11-2 Evidence Bold Statement** (p. 385)

\* What Evidence Supports Evolution (p. 385)

In your own words summarize how each is proof.

1. Fossils
2. Similarities in Early Development
3. Similarities in Body Structure

### **Homologous structures** (p. 386)

11-3 Rate of Change (copy bold p. 388)

A new species can form when a group of individuals remains isolated from the rest of.

Ex. Kaibab and Abert's Squirrels (p. 389)

The Rate of Evolution (Bold p. 390)

Scientists have developed patterns to describe the pace of evolution, gradualism and punctuated equilibrium.

**Gradualism** (p. 391)

**Punctuated equilibrium** (p. 391)

### **How and what will be graded**

1. Notes 100pts.
2. 11-1 All pages 50pts
3. Darwin's Finches 100pts
4. 11-2 All pages 50 pts
5. Gizmo Natural Selection (including post-test) 120pts
6. 11-3 All pages 50 pts
7. Open book test: 100pts

\*\*\*\* Special Announcement Look for extra credit work posted to your Classroom by March 23. Lets see how many we can put in the Century Club this 9wks.