

\* This critical thinking review of Ch. 6 will be expanded as the unit unfolds.

\*\* This handout has spaces between concepts for you to PRACTICE TAKING NOTES as we discuss Chapter 6.

### Why a critical review of this chapter in the textbook?

This topic is NOT a minor issue. It's foundational, not only to much of science, but especially to big moral questions of life, character, culture, and **CHRIST**. Currently, most people in positions of power and profit in both academia and media promote the theoretical hypotheses of macroevolutionary beliefs. However, many internationally respected scientists from every field are now challenging the theory. **WHY?** Because of new objective evidence that shows it to be both logically and scientifically a *falsified* hypothesis.

So, in this unit and throughout the year, we will be investigating both sides of the subject, the scientists, and the newest, best evidences for the big questions involved. I'll provide numerous extra materials for you. Your responsibility is to become informed to think biblically, logically, and critically about this and all other issues of life. Most of these extra materials will be **OPTIONAL** and not required. But a few will be required reading for all students. I'll make it clear which ones those will be.

THIS DOCUMENT IS ONE OF THOSE ☺.

### SUGGESTED RESOURCES for PARENTS or students to do further study about any questions or issues

#### THEOLOGICAL RESOURCES

##### Genesis Commentaries

- Sarfati PhD Chemistry
- Lisle PhD Astrophysics
- Morris D.Min.
- Leupold Th.D Theology
- Keil & Delitzsch (PhD equivalent degrees. Two of the most respected biblical and historical scholars of all time.)

#### THEOLOGICAL ORGANIZATIONS/WEBSITES:

- GTY.org
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#### SCIENTIFIC RESOURCES

- LRA – Logos Research Associates
- ICR – Institute for Creation Research
- CMI – Creation Ministries International
- AIG – Answers In Genesis

#### TEXTBOOK OUTLINE & CRITICAL REIEW:

\* As the **UNIT** unfolds, Mr. Galloway will provide specific critiques of each major section in Ch. 6 of the **TEXTBOOK**. Much of what the chapter says about **MICRO**evolution within a population of a single kind (like canines) is accurate. However, it also makes claims about **MACRO**evolution supposedly from one major kind into another, like microbes becoming men over time. These claims are unverified hypotheses (beliefs) that at least **FOUR M&M's** made everything. **M&M's** are mythical mystery mechanisms. (See the separate document for a detailed discussion.)

**TITLE:** The Environment and Change Over Time: How do species adapt to changing environments over time?

**Question #1 at the chapter beginning**, in the box called, "Get Ready to Read .... What do you think? ...decide if you **agree or disagree** ...."

**"1. Original tissues can be preserved as fossils."**

ADD MR. GALLOWAY'S NOTES BELOW:

#### LESSON 1 FOSSIL EVIDENCE OF EVOLUTION

##### THE FOSSIL RECORD

ADD MR. GALLOWAY'S NOTES BELOW:

##### FOSSIL FORMATION

ADD MR. GALLOWAY'S NOTES BELOW:

- Mineralization

- Carbonization

- Molds and Casts

- Trace Fossils

- Original Material

##### DETERMINING A FOSSIL'S AGE

- Relative-Age Dating

- Absolute-Age Dating

##### FOSSILS OVER TIME

- The Geologic Time Scale

- Dividing Time

## **EXTINCTIONS**

- Environmental Change
  - \* Sudden Changes
  - \* Gradual Changes
- Extinctions and Evolution

## **LESSON 2 THEORY OF EVOLUTION BY NATURAL SELECTION**

### **CHARLES DARWIN**

- Voyage of the *Beagle*
- The Galapagos Islands
  - \* Tortoises
  - \* Mockingbirds and Finches

### **DARWIN'S THEORY**

- Common Ancestors
- Variations
- Natural Selection

### **ADAPTATIONS**

- Types of Adaptations
  - \* Structural Adaptations
  - \* Behavioral Adaptations
- Environmental Interactions
  - \* Camouflage
  - \* Mimicry

### **ARTIFICIAL SELECTION**

- \* Selective Breeding

## **LESSON 3 BIOLOGICAL EVIDENCE OF EVOLUTION**

### **EVIDENCE FOR EVOLUTION**

- Comparative Anatomy
  - \* Homologous Structures
  - \* Analogous Structures
- Vestigial Structures
- Developmental Biology
  - \* Pharyngeal Pouches
- Molecular Biology
  - \* Comparing Sequences
  - \* Divergence

### **THE STUDY OF EVOLUTION TODAY**

- How New Species Form
- Diversity