

# Earth Science - Bakersfield College Lecture Notes

J. Pierce

## Overview of the Chapter:

1. Before reading or looking at the chapter, write down what you know about the Earth Sciences - from prior experiences
2. Write down 3 questions of your own that you want to know about Earth Science.
3. Look through the chapter and find 5 figures that capture your interest and briefly describe your each figure.
4. Write a question (before you read the paragraph) for various paragraph headings that catch your interest.

## **Chapter - 1 - Introduction to earth science.**

1. How do scientists view systems? Briefly explain the meaning of a system and draw a diagram of the three major systems (isolated, closed and open systems) and briefly explain their differences.
2. Explain why the earth is considered a closed system and why subsystems within the earth are considered open.
3. Explain the differences between renewable and non-renewable resources. Give 2 examples each for renewable and non-renewable resources.
4. Briefly describe 3 ways that you think man has impacted our earth

## The Major Disciplines of Earth Sciences

Geology: - \_\_\_\_\_

Physical Geology:

Historical Geology:

Physical Oceanography: \_\_\_\_\_

Ocean chemistry:

Physics:

Sea floor geology:

Coastal processes:

Sea floor topography:

Metrology - \_\_\_\_\_

Give two examples of where one might use the discipline of Meteorology

Astronomy - \_\_\_\_\_

List three examples where one might use the discipline of Astronomy.

Draw a diagram showing the sun and order of planets with their relative sizes

### The Fragile Earth

Hydrosphere - \_\_\_\_\_

List some characteristics of the hydrosphere

Atmosphere - \_\_\_\_\_

List some characteristics of the hydrosphere

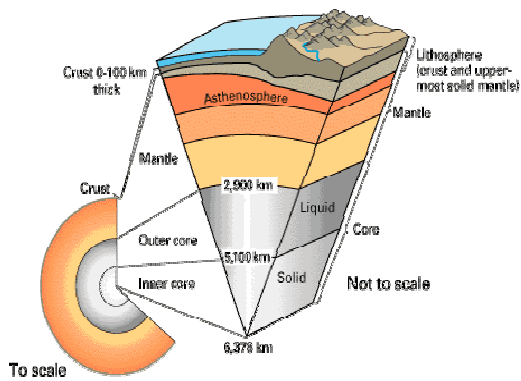
Lithosphere - \_\_\_\_\_

List some characteristics of the geosphere

Biosphere - \_\_\_\_\_

List some characteristics of the biosphere

Arrange the proper densities for each layer of the earth's interior



Why do you think the densities progressively get "lighter" towards the surface of the earth?

### The Scientific Method

Why is the scientific method useful for unraveling the scientific mysteries of our universe?

Arrange the following steps of the scientific method in their proper order. For each step, give a brief explanation describing how the step seeks the truth or accuracy of processes in our universe.

Experimentation

Hypothesis

Observation

Theory