

# *Earth Science*

With

Mr. Thomas



# Earth History

## Re-Cap:

- ▶ Defn. of a Fossil:

- ▶ Any evidence of earlier life preserved in rock.
- ▶ The study of these fossils is called:

**Paleontology**

# Absolute Time:

## Defn. of a Half-Life:

- ✓ The time it takes for half of the radioactive atoms in a sample to decay to a stable product.

# Views of Earth's Past:

## The Geologic Timescale:

- 1) A summary of major events in Earth's past that are preserved in the rock record.

# Views of Earth's Past:

2) Geologic time is divided into:

**Eons**

Which are divided into:

**Eras**

Which are divided into:

**Periods**

Which are divided into:

**Epochs**

# Views of Earth's Past:

- Eons** - The longest segment of geologic time.
- Eras** - Subdivisions of eons (3).
- Periods** - Periods differ from one another in characteristic plant & animal life.
- Epochs** - Further divisions of periods.

# - Evolution -

- ▶ Defn. of Evolution:
  - ▶ The process of change that produces new life forms over time.
- ▶ Provides a scientific explanation for the past & present diversity of life.

# - Evolution -

## ▶ Theory of Natural Selection:

▶ "Survival of the Fittest!"

▶ Proposed by Charles Darwin in 1859, states that those organisms that survive to produce offspring are those that have inherited the most favorable traits for surviving in a particular environment.

▶ **Examples:** **Turtle**

**Giraffe** **Cockroach** **Ant Eater**



# Earth History Project



- ▶ Imagine that we could go back in time to any part of the Earth's geologic history, making it possible to see the emergence of the first life-form, or see dinosaurs like the movie Jurassic Park. You have been selected by Rock of Ages Travel Agency to create a marketing scheme for a particular **Era, Period, or Epoch** in the geologic time of Earth.

# Earth History Project

- ▶ In order to fulfill the agency's request, you must submit the following no later than Monday, April 4<sup>th</sup> 2005:

- ▶ Poster

- ▶ Promotional Brochure / Flier

Extra Credit:

- ▶ 3 to 5 minute Power Point Presentation or video.



# Earth History Project

What's going to make the grade?

Poster:

- ~Creativity~!!!
- Factual & Fictional Info
  - Colorful!!
  - Attractive!

# Earth History Project

What's going to make the grade?

Brochure:

- ~Creativity~!!!
  - Factual & Fictional Info
    - Colorful!!
    - Attractive!
  - 2-page or 3-page bi-fold
- Accepted!

That's it