Evolution is a series of changes, some gradual and some sporadic, that accounts for the present form and function of objects, organisms, and natural and designed systems. The general idea of evolution is that the present arises from materials and forms of the past. Although evolution is most commonly associated with the biological theory explaining the process of descent with modification of organisms from common ancestors, evolution also describes changes in the universe.

**Objective:**
1. State the principle of uniformitarianism.
2. Explain how the law of superposition can be used to determine the relative age of rocks.
3. Compare three types of unconformities.
4. Apply the law of crosscutting relationships to determine the relative age of rocks.

**Tuesday**

**COS:**
ES 3b: Geologic time can be estimated by observing rock sequences and using fossils to correlate the sequences at various locations. Current methods include using the known decay rates of radioactive isotopes present in rocks to measure the time since the rock was formed. HNS 3c: Occasionally, there are advances in science and technology that have important and long-lasting effects on science and society. Examples of such advances include the following: Copernican revolution; Newtonian mechanics; Relativity; Geologic time scale; Plate tectonics; Atomic theory; Nuclear physics; Biological evolution; Germ theory; Industrial revolution; Molecular biology; Information and communication; Quantum theory; Galactic universe; Medical and health technology. UCP 4: Evolution is a series of changes, some gradual and some sporadic, that accounts for the present form and function of objects, organisms, and natural and designed systems. The general idea of evolution is that the present arises from materials and forms of the past. Although evolution is most commonly associated with the biological theory explaining the process of descent with modification of organisms from common ancestors, evolution also describes changes in the universe.

**Objective:**
1. Describe four ways in which entire organisms can be preserved as fossils.
2. List five examples of fossilized traces of organisms.
3. Describe how index fossils can be used to determine the age of rocks.

**Wednesday**

**COS:**
ES 3b: Geologic time can be estimated by observing rock sequences and using fossils to correlate the sequences at various locations. Current methods include using the known decay rates of radioactive isotopes present in rocks to measure the time since the rock was formed. HNS 3c: Occasionally, there are advances in science and technology that have important and long-lasting effects on science and society. Examples of such advances include the following: Copernican revolution; Newtonian mechanics; Relativity; Geologic time scale; Plate tectonics; Atomic theory; Nuclear physics; Biological evolution; Germ theory; Industrial revolution; Molecular biology; Information and communication; Quantum theory; Galactic universe; Medical and health technology. UCP 4: Evolution is a series of changes, some gradual and some sporadic, that accounts for the present form and function of objects, organisms, and
natural and designed systems. The general idea of evolution is that the present arises from materials and forms of the past. Although evolution is most commonly associated with the biological theory explaining the process of descent with modification of organisms from common ancestors, evolution also describes changes in the universe.

Objective:
1. Describe four ways in which entire organisms can be preserved as fossils.
2. List five examples of fossilized traces of organisms.
3. Describe how index fossils can be used to determine the age of rocks.

Before: Bell Ringer ACT/Video Journal
During: CR; Critical Thinking 14-17; Math Skills/Algebraic Rearrangement; Demonstrate half-life
After: Why It Matters/A Record of Yellowstone's Explosive Past

Thursday
COS: all previously listed standards ref: Chapter 8
Objective: all previously listed
Before: Bell Ringer ACT/Science Quote
During: Written Test
After: Complete Yellowstone's Explosive Past

Friday
COS: all Chapter 8
Objective: all Chapter 8
Before: Bell Ringer ACT/Science Joke
During: NOVA Video: Iceman Murder Mystery
After: Video Log: Iceman Murder Mystery