Green p.590-665  **Study Guide** Orange 362-413

**Earth's History and Geologic Time**

**Define**

* Geologic time scale - Cyanobacteria
* Index fossil - Homo sapiens
* Principle of superposition - Angiosperms
* Relative age dating -Natural selection
* Eon -Radioactive decay
* Era -Paleontologist
* Period -Absolute age
* Epoch -Radiometric dating
* Half life

1. If the same types of fossils are found in two separate rock layers, it's likely that the two rock layers \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2. Name two sources of Earth's internal energy.

3. Describe the major reason why scientists think the dinosaurs went extinct.

4. How did cyanobacteria help increase the amount of oxygen in the atmosphere?

5. The development of \_\_\_\_\_\_\_\_ helped to promote the development of complex organisms.

6. When did the Earth form?

7. List the order of the four Eras we described from longest ago to present day.

8. Describe the life forms in the Precambrian, Paleozoic, Mesozoic and Cenozoic Eras.

9. After cyanobacteria started to increase the amount of oxygen in the atmosphere and the ozone layer started to develop what could start to develop as well?

10. How did the Paleozoic Era end?

11. How old is a mammoth's tusk if 25% of the original C-14 remains in the sample? The half life of C-14 if 5,730 years.

What is the order of rock from oldest to youngest?

13. Give an example of a trace fossil.

14. Describe what each era looked like.

Written response: You must describe how relative and absolute ages differ. Describe how scientist use them to establish the ages of rock layers using words like “compares”, “approximate” and “exact”.