**STUDY GUIDE REVIEW UNIT 7 NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Based on interpretations of rock units and changes in fossil life forms, geologists have divided Earth’s history into manageable units that are represented by the \_\_\_\_.
2. What is the currently accepted age of Earth?
3. The largest expanse of time on the geologic time scale is the \_\_\_\_.
4. Which of the following lists the divisions of the geologic time scale in order from longest to shortest?
5. Which of the following is the study of tree rings to determine ages?
6. Which of the following is bands of alternating light- and dark- colored sediments caused by glaciers?
7. In what type of rocks would geologists most likely find evidence of past life forms?
8. According to the principle of cross-cutting relationships, an intrusive rock body is \_\_\_\_.
9. The dating process that places geologic events in proper sequence is referred to as a \_\_\_\_.



1. Which of the following sequences correctly lists the geologic events in Figure 12-1 in order from oldest to youngest (oldest listed first)?
2. What is the youngest feature shown in Figure 12-1?
3. An unconformity is a(n) \_\_\_\_.
4. What are fossils?
5. In what type of rocks are most fossils found?
6. The footprints of a dinosaur are an example of what type of fossil?
7. The task of using fossils to match up rocks of similar ages in different areas is called \_\_\_\_.
8. Which of the following must be true for a fossil organism to be useful as an index fossil?
9. Index fossils allow geologists to \_\_\_\_.
10. Radioactivity is produced when unstable nuclei \_\_\_\_.
11. The time it takes for 50% of the nuclei in a radioactive sample to decay to its stable isotope is called \_\_\_\_.
12. Atoms with the same atomic number but different mass numbers are called \_\_\_\_.
13. Assume you began with 10 g of a radioactive parent isotope. How many grams of parent isotope will be present in the sample after 2 half-lives?
14. Radiometric dating is possible because the rates of decay of radioactive isotopes \_\_\_\_.
15. The radiometric dating of an igneous rock provides \_\_\_\_.
16. Which two substances do geologists use in radiocarbon dating?





1. Which fossil would be the best choice for being selected as as index fossil?
2. What geologic feature do the Green Shale and Brown Sandstone best represent?
3. At two locations there is an unconformity (buried erosional surface) which rock layer is missing at this place in the rock formation?
4. Which geologic column contains the youngest rock layer?
5. The fossils in the rock formation in column A indicate that this rock layer was once covered by what?