

Name: _____ KEY _____

Hour: _____ Date: _____

Directions: Match each fossil-related term to its correct meaning

1. ____D____ Trace fossil

5. ____C____ Coprolite

6. ____I____ Fossils

7. ____G____ Paleontologist

8. ____H____ Amber

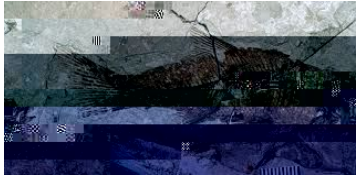
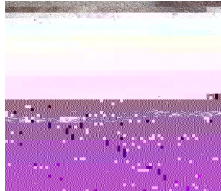
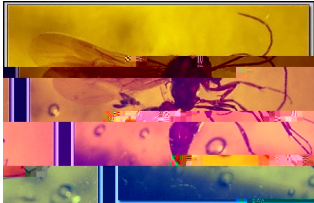
9. ____J____ Absolute age

10. ____A____ Relative age

a. Age of something compared to other things	
b. The process by which the remains of ancient living things are turned to rock	
c. Fossilized dinosaur dung	
d. A fossil that is found in a specific area	
e. Back stage of layers of things packed together	
f. Hardened tree sap	
g. A scientist who studies fossils	
h. Remains of ancient life that have been turned to stone	
i. Specific age of a rock or fossil	
j. Absolute age	

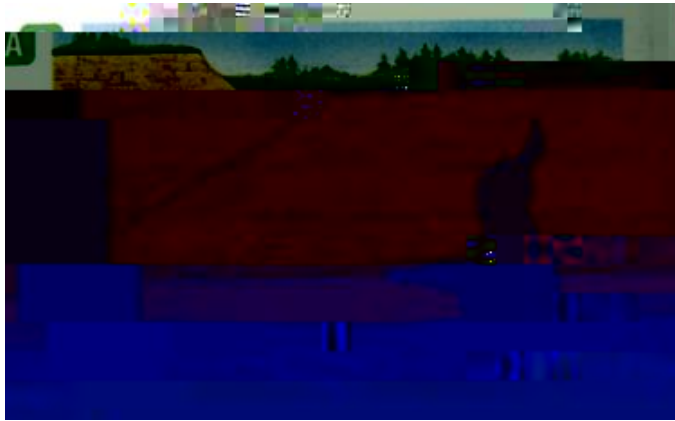
Directions: Use your classroom notes and textbook to complete the graphic organizer

A fossil is... The remains, imprints or traces of prehistoric organisms that are preserved in rock	
Types of Fossils	
Type: Petrified Definition/Description: Form when minerals replace all or part of an organism	Fossil Illustration 

Type: Mold/Casts Definition/Description: A mold forms when hard parts of an organism are buried in sediment; the hard parts completely dissolve over time, leaving behind a hollow area. A cast forms as a result of a mold when minerals and sediment fill in the impression.	Fossil Illustration 
Type: Carbon Film Definition/Description: A carbon residue is left behind after an organism gets pressed against a hard object and decays.	Fossil Illustration 
Type: Trace Definition/Description: Trace fossils show the activities of an organisms. Examples include footprints, scat, bite marks, etc.	Fossil Illustration 
Type: Original or Preserved Remains Definition/Description: The actual organism or part of it has been preserved in amber, ice or tar	Fossil Illustration 

11. What type of rock are mo

Directions: Use your classroom notes and textbook to help you determine the relative ages of rock layers.



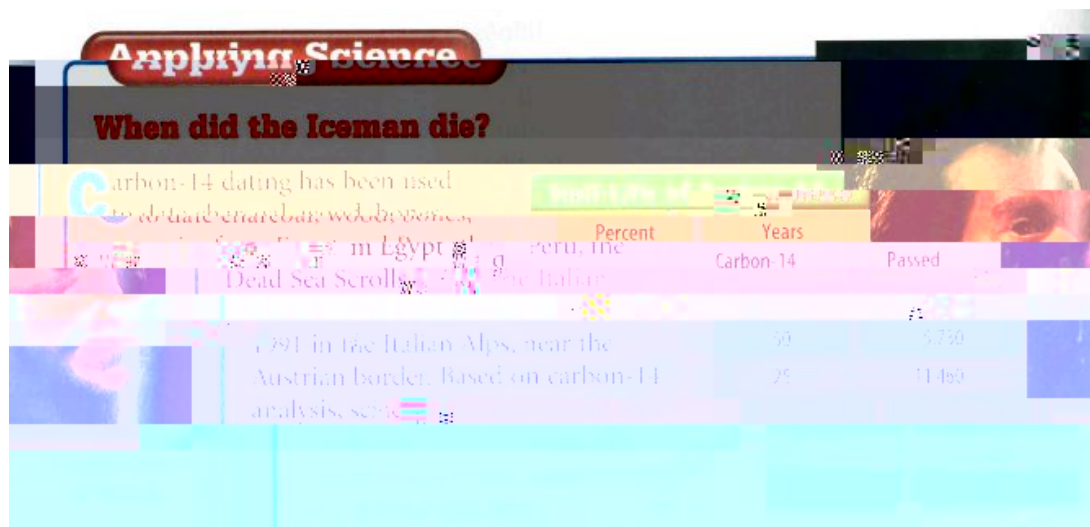
12. On Figure A, identify the relative age of each rock layer, igneous rock intrusion and unconformity.

Shale - Sandstone - Limestone - Unconformity - Sandstone - Limestone - Fault/Intrusion

13. Identify the relative age of each rock layer, igneous rock intrusion and unconformity for Figure B.

Sandstone-Shale-Limestone-Sandstone-Unconformity-Limestone-Shale-Intrusion-Fault-Sandstone-Intrusion

Directions: Use your classroom notes and textbook to answer the following questions on absolute dating.



14. Identify the Problem: The half-life chart shows the decays carbon-14 over time. Half-life is the time it takes for half of a sample to decay. Fill in the years passed where only 3.125 percent of carbon-14 remains. Is there a point at which no carbon-14 would be present? Explain.

28,650 years. There will never be a point where no carbon-14 would be present because only 50% decays each time a half-life passes.

15. Estimate how much carbon-14 still was present in the Iceman's body that allowed scientists to determine his age.

About 54%

16. If you had an artifact that originally contained 10.0 g of carbon-14, how many grams would remain after 17,190 years?

1.25 grams

Directions: Use your classroom notes and textbook to answer the following questions on geologic time.

17. Discuss how fossils relate to the geologic time scale.

Fossils relate to the geologic time scale in that scientists use the fossil record of life coming into being or life becoming extinct as the points where divisions of the scale begin or end.

18. Infer how plate tectonics might lead to extinction

Plate tectonics (long term) could lead to changes in the climate and/or environment. Organisms might not be able to adapt to the changes quickly enough and become extinct.

19. Explain how paleontologists use trilobite fossils as index fossils for various geologic time periods.

Trilobite fossils have been radiometrically dated to 521-240 mya. When scientists observe them in a layer of rock, they know how old that layer is. From there, they can use relative dating to know approximate ages of other rocks/fossils.

Directions: Use the diagram to answer the following questions.

Cenozoic Era	Quaternary Period	Holocene Epoch
		Pleistocene Epoch
	Tertiary Period	Pliocene Epoch
		Miocene Epoch
		Oligocene Epoch
		Eocene Epoch
		Paleocene Epoch

20. What is the oldest epoch in the Cenozoic Era?

Paleocene Epoch

21. What is the youngest epoch in the Cenozoic Era?

Holocene Epoch

22. Which epoch is part of the Quaternary Period?

- a. Oligocene
- b. Eocene
- c. **Pleistocene**
- d. Pliocene