End-of-Unit Content Assessment

1. Geysers, volcanoes, and hot springs all share which of the following?

   A. They form along faults.

   B. Scientists can predict when they will erupt.

   C. They form both along plate boundaries and above hotspots.

   D. They form only along plate boundaries.

   Answer _____

2. In which of the following sentences is *conclusion* used correctly?

   A. Inge Lehmann suspected that Earth might have more than three layers, so she came to the conclusion that it did.

   B. In his conclusion, the scientist proposed different possibilities of how earthquakes might occur.

   C. The researcher reached a conclusion after years of collecting evidence.

   D. Once you reach a conclusion, it is set in stone and no other evidence can be examined.

   Answer _____

3. Label each of the following rock descriptions with the appropriate word: *igneous*, *metamorphic*, or *sedimentary*.

   _____ a rock that is made of sediments that have been naturally compacted and cemented together

   _____ a rock that forms when magma cools and solidifies

   _____ a rock that forms when minerals in other types of rocks are altered due to extreme heat and pressure

4. What is geology?

   A. the study of relationships between living things and their environment

   B. the study of the makeup of the earth and the processes that change and shape it

   C. the study of the characteristics of the earth's surface

   D. the study of past human life and activities by examining bones, tools, and other objects left behind

   Answer _____

5. The theory of plate tectonics states that _____.

   A. Earth's continents were once all joined together as one supercontinent

   B. Earth's continents stay still and do not move

   C. Earth's crust, mantle, and core all form tectonic plates that change very slowly

   D. Earth's crust and part of the mantle are broken up into sections that slowly move

   Answer _____

6. Label each of the following descriptions with the appropriate term: *physical weathering*, *chemical weathering*, or *erosion*.

   _____ a process that moves sediments to new locations

   _____ a process that breaks big rocks into smaller rocks without changing the minerals they contain

   _____ a process that breaks down rocks by changing the minerals they contain

Match the item from the column on the left with the description on the right. Type the letter on the line.

7. _____ tsunami	a. a deep-sea geyser that forms as seawater sinks down through cracks in the oceanic crust and then releases extremely hot, mineral-rich water back up through cracks in the crust
8. _____ hydrothermal vent	b. an underwater volcano that forms wherever magma is erupting through oceanic crust
9. _____ seamount	c. a gigantic wave of seawater caused by an earthquake in oceanic crust

10. A mid-ocean ridge is _____; an ocean trench is _____.

    A. an underwater mountain; a narrow, extremely deep valley

    B. a deep-sea geyser; an underwater volcano

    C. a geyser; an underwater mountain

    D. a narrow, extremely deep valley; a deep-sea geyser

    Answer _____

11. Seafloor spreading can cause a mid-ocean ridge and an ocean trench to form. Label each of the following causes with the appropriate effect: *mid-ocean ridge* or *ocean trench*.

    A. The seafloor dips down as one tectonic plate slides under another._____

    B. Magma erupts through huge cracks in Earth's crust as lava. _____

12. Type the answer that best supports the following statement.

> The rock cycle explains the changes that occur in rocks over very long periods of time.

    A. Rocks are created and then destroyed in a long process that occurs slowly over time.

    B. Rocks are created, destroyed, and recreated in a continuous cycle.

    C. Weathering and erosion change rocks in a long process that occurs slowly over time.

    D. Rocks are solidified from sediments in a continuous cycle.

    Answer _____

13. Fill in the "Type of Volcano" column in the chart with the appropriate type being described: *active volcano*, *dormant volcano*, or *extinct volcano*.

Type of Volcano	Description
	a type of volcano that has not erupted for at least 10,000 years and is not likely to erupt again
	a type of volcano that has erupted in the past 10,000 years and is likely to erupt again
	a type of volcano that is considered active but hasn't erupted for a very long time

14. What evidence suggested that the continents' locations were once very different than they are today?

    A. the same types of rocks and fossils were discovered in different parts of the world

    B. maps from long ago showed that the continents were once closer together

    C. ancient records were found describing the climate of Antarctica as being warm

    D. Alfred Wegener introduced the continental drift hypothesis

    Answer _____

15. Moving apart, colliding, and sliding sideways past one another are the three different ways in which _____ interact.

    A. faults

    B. mid-ocean ridges

    C. continents

    D. tectonic plates

16. The continental drift hypothesis explains that _____.

    A. all the continents exist on plates

    B. all of the continents were once joined as Pangaea until they broke apart and slowly moved away from each other

    C. hot water under the earth explodes on the surface

    D. climates change and animals evolve over long periods of time

    Answer _____

17. Which of the words in the following sentence provides the best clue as to the meaning of the word *fossil*?

> Geologists found fossils of an ancient fern in similar rock layers in Africa, India, Australia, and South America.

A. geologists found

B. similar rock layers

C. in Africa, India, Australia, and South America

D. ancient fern

Answer _____

18. Weathering is the process in which _____; erosion is the process in which _____.

A. rocks are mixed with liquid and completely broken down; rocks are packed together tightly

B. rocks are broken down into smaller pieces; sediments are moved from place to place

C. sediments are moved from place to place; rocks are broken down into smaller pieces

D. large amounts of rocks move down the side of a mountain; rocks are broken down and the minerals they contain change

Answer _____

Match the item from the column on the left with the description on the right. Type the letter on the line.

19. _____ geyser	a. a hill or mountain that forms over a crack in Earth's crust from which lava erupts
20. _____ hotspot	b. a crack in Earth's crust
21. _____ fault	c. the violent shaking of the ground caused by huge blocks of rock moving along a fault
22. _____ rock	d. an underground hot spring that periodically erupts, shooting hot water and steam into the air
23. _____ volcano	e. a very hot region deep within Earth's mantle where a huge magma chamber forms
24. _____ earthquake	f. a naturally occurring nonliving solid made of minerals

25. Read the description and examples in each row and type the correct letter in the "Type of Mountain" column.

    A. fold mountains

    B. fault-block mountains

    C. dome mountains

Type of Mountain	Description	Examples
	mountains formed when rocks are pushed up into huge folds by moving tectonic plates; often contain quite a bit of sedimentary rock	Himalayas between India and China; Alps in Europe; Appalachians of North America; Urals in Russia
	mountains generally formed when magma pushes upward into Earth's crust from the mantle and cools into igneous rock underground, causing the crust above it to bulge; usually occur as isolated mountains on otherwise flat plains	Utah's Navajo Mountain; Black Hills of South Dakota
	mountains formed when gigantic blocks of rock move up and down along faults	Germany's Harz Mountains; Grand Tetons in Wyoming; Basin and Range Province of Utah, Nevada, and Arizona

26. What natural occurrence does the following myth passage explain?

> The Chief of the Above World came to the aid of his people. He fought Monadalkni and the two spirits waged a violent, fiery battle. Sahale Tyee eventually gained the upper hand and forced Monadalkni back down into his mountain. Sahale Tyee caused the top of the mountain to collapse, forever shutting off this entrance to the Below World.

A. an earthquake

B. a volcanic crater being formed

C. a tsunami

D. a volcanic eruption

Answer _____

27. The _____ produces lines to show the energy of seismic waves while the _____ applies numbers to measure the magnitude of an earthquake based on the largest seismic wave recorded.

A. Modified Mercalli Intensity Scale; seismograph

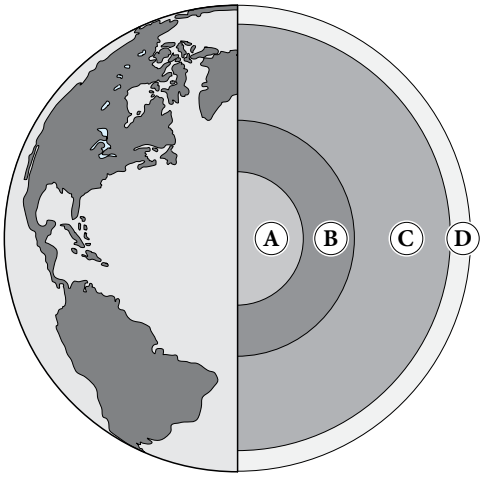
B. seismograph; Richter scale

C. Modified Mercalli Intensity Scale; Richter scale

D. Richter scale; seismograph

Answer _____

28. Place the following labels on the diagram in the appropriate locations: *inner core*, *outer core*, *mantle*, and *crust*.



A.

B.

C.

D.

29. Select the most appropriate answer to the following question.

What do myths help explain?

A. everyday occurrences

B. unpredictable natural events

C. cultural customs

D. why people tell stories

Answer _____

30. Which of the following provides evidence of weathering and erosion?

A. Volcanoes like Mount Fuji

B. Geysers like Old Faithful in Yellowstone

C. Island chains like the Hawaiian Island chain

D. Large canyons like the Grand Canyon

Answer _____

_____ */30 points*