

Student: _____

1. We depend on geologists for the raw materials we need for survival.
True False
2. Most deaths associated with volcanic eruptions are due to burns or lava flows.
True False
3. A tsunami has a small wave height, travels rapidly, and is not noticed by people in boats.
True False
4. While the reserves of petroleum hydrocarbons within the United States are limited, other geologic resources (iron, aluminum, copper, and tin) are available in great abundance.
True False
5. Geology uses the scientific method to explain natural aspects of the Earth.
True False
6. Deeply buried rock that is hot and under pressure can deform like taffy or putty.
True False
7. Ocean - ocean plate convergence formed major mountain belts such as the Andes and Cascades.
True False
8. The mantle is the most voluminous of Earth's three major concentric zones.
True False
9. Earth's lithosphere is made up of the uppermost part of the mantle and crust.
True False
10. Understanding geology can help us lessen or prevent damage to the environment.
True False
11. Most convergent plate boundaries coincide with the crests of submarine mountain ranges called mid-oceanic ridges.
True False
12. Plate tectonics regards the lithosphere as divided into segments (plates) that are in horizontal motion.
True False
13. A transform plate boundary occurs where two plates converge.
True False
14. Convergent boundaries, due to their geometry, are the sites of the largest earthquakes on Earth.
True False
15. After the opening of the North Slope in Alaska the U.S. stopped importing petroleum.
True False
16. The North American Plate is all on one plate.
True False
17. Rocks formed at high temperatures and under high pressure deep within the Earth and pushed upward by tectonic force are stable in their new environment.
True False

18. Rocks brought to the earth's surface by internal processes are worn down, and eroded by surficial processes.
True False
19. The Earth is about 4.6 billion years old.
True False
20. The Earth can be considered as interrelated systems or spheres.
True False
21. The Earth's system that includes the oceans, rivers, lakes, and glaciers of the world is called the _____.
A. biosphere
B. hydrosphere
C. atmosphere
D. geosphere
E. solid Earth
22. The _____ and the Alpine Fault of New Zealand are examples of transform plate boundaries.
A. New Madrid Fault of Arkansas
B. Choctaw Fault of Oklahoma
C. San Andreas Fault of California
D. East African Rift
E. Rio Grande Rift
23. A _____ is a huge ocean wave usually caused by a displacement of the sea floor and commonly associated with massive earthquakes.
A. S-wave
B. tidal wave
C. tsunami
D. seiche
E. breaker
24. A ____ is a hot, turbulent mixture of expanding gases and volcanic ash that flows rapidly down the side of a volcano.
A. pyroclastic cloud
B. mud flow
C. lava flow
D. pyroclastic flow
E. hyaloclastic flow
25. Eruptive activity at the summit of the Nevada del Ruiz volcano in Colombia in 1985 caused snow and ice to melt, generating a ____ that killed 23,000 people in the village of Armero.
A. gas cloud
B. mud flow
C. lava flow
D. pyroclastic flow
E. hyaloclastic flow
26. To understand geology one must understand how the solid Earth interacts with water, air, and living organisms. For this reason, it is useful to think of Earth as being part of a _____.
A. hydrosphere
B. system
C. trend
D. group
E. formation

27. Among other things, geologists are employed as ____.
- A. petroleum geologists
 - B. environmental geologists
 - C. marine geologists
 - D. hydrogeologists
 - E. All of the answers are correct.
28. Rock deep within the Earth is _____ and _____.
- A. hot; heat flows inward toward Earth's center.
 - B. cool; heat flows in toward Earth's center
 - C. hot; heat flows out toward Earth's surface
 - D. the same temperature throughout the earth; heat flow is not an important consideration
 - E. unknown; we can only guess about conditions there
29. Earth's external heat engine is driven by ____.
- A. solar power
 - B. residual cosmic radiation from the Big Bang
 - C. the decay of radioactive isotopes
 - D. tides
 - E. meteor impacts
30. ____ refer(s) to the scientific study of Earth.
- A. Hydrology
 - B. Geology
 - C. Spheres
31. The Earth's interior heat engine works because hot buoyant material deep within the Earth _____ while cold denser material _____.
- A. moves upward; moves downward
 - B. contracts and sinks; expands and rises
 - C. contracts and rises; expands and sinks
 - D. expand and sinks; contract and rises
32. The _____ is the most voluminous of the Earth's three major concentric zones.
- A. core
 - B. mantle
 - C. lithosphere
 - D. asthenosphere
 - E. crust
33. Listed from Earth's center outward, the three concentric zones of Earth are the ____.
- A. crust, mantle, core
 - B. mantle, crust, core
 - C. core, crust, mantle
 - D. mantle, core, crust
 - E. core, mantle, crust
34. A _____ is a scientific concept that has been tested and is in all likelihood true.
- A. concept
 - B. hypothesis
 - C. theory
 - D. scenario
 - E. belief

35. _____ are geological forces generated inside the Earth.
- A. Surficial forces
 - B. Electrochemical forces
 - C. Tectonic forces
 - D. Inertial
 - E. Celestial
36. Earthquakes, volcanic eruptions, landslides, floods, and tsunamis are all examples of:
- A. earth-altering processes.
 - B. earth hazards.
 - C. geologic resources.
 - D. geospheric processes.
 - E. geologic hazards
37. The _____ collectively make up the lithosphere.
- A. the crust and the whole mantle
 - B. the crust and the uppermost part of the mantle
 - C. the crust and asthenosphere
 - D. the upper and lower mantle
 - E. the asthenosphere and the upper mantle
38. The ____ is soft and therefore flows more readily than the underlying mantle.
- A. crust
 - B. asthenosphere
 - C. lithosphere
 - D. core
 - E. plate
39. A hypothesis that passes repeated tests ultimately becomes ____.
- A. a guess
 - B. an observation of a phenomenon
 - C. a first, tentative idea to explain a phenomenon
 - D. a theory
 - E. a proven law of nature
40. After data have been analyzed, tentative explanations or solutions called _____ may be proposed.
- A. a guess
 - B. an observation of a phenomenon
 - C. a hypotheses
 - D. a concept that has been tested reproducibly and is likely to be true
 - E. a proven law of nature
41. Plate tectonics is a unifying idea that helps explain where and why there are ____ on Earth.
- A. earthquakes
 - B. volcanoes
 - C. mountain belts
 - D. oceanic ridges and trenches
 - E. All of the answers are correct.
42. The two major types of crust are oceanic crust and ____.
- A. continental crust
 - B. lithosphere
 - C. convergent crust
 - D. thin crust
43. What is Earth's external heat engine?
- A. geothermal power
 - B. solar power
 - C. All of Earth's heat is generated internally.

44. The concept of plate tectonics regards the earth's ___ as broken into a number of ___ that are in motion relative to each other.
- A. crust; plates
 - B. mantle; plates
 - C. asthenosphere; plates
 - D. lithosphere; plates
 - E. plates; lithosphere
45. A _____, by scientists definition, is something that has been overwhelmingly verified.
- A. hypothesis
 - B. guess
 - C. prediction
 - D. theory
46. Plates are known to be moving away from each other ___.
- A. across mountain ranges like the Himalayan Mountains
 - B. across subduction zones
 - C. across mid-ocean ridges
 - D. across the stable interior of continents
 - E. along transform faults
47. A _____ boundary occurs where plates move toward one another.
- A. convergent
 - B. concurrent
 - C. rift
 - D. abutting
 - E. transform
48. The _____ of old seafloor takes place at convergent boundaries.
- A. destruction
 - B. creation
 - C. production
 - D. erosion
 - E. extinction
49. The North American plate is moving _____.
- A. north
 - B. south
 - C. west
 - D. east
 - E. nowhere, it's fixed
50. Where a subducting plate slides beneath the lithosphere, melting takes place and a(n) _____ is created.
- A. plate
 - B. ocean trench
 - C. seamount
 - D. sedimentary rock
 - E. coral reef
51. Sedimentary rock that becomes deeply buried may be transformed by heat and pressure into _____ rock.
- A. soil
 - B. igneous
 - C. granite
 - D. metamorphic
 - E. All of the answers are correct.

52. The product of the breakdown of surface rocks by weathering and erosion is ____.
- A. lava
 - B. magma
 - C. sediment
 - D. quartz
 - E. ash
53. With the cementation of loose particles sediment becomes ____.
- A. molten
 - B. metamorphic
 - C. lithified
 - D. igneous
 - E. basalt
54. _____ takes place where moving water, ice, and wind loosen and remove material on the continents.
- A. Burial
 - B. Metamorphism
 - C. Melting
 - D. Subsidence
 - E. Erosion
55. Disintegration of rock at Earth's surface may be facilitated by water ____.
- A. flowing on the surface in streams and as runoff
 - B. frozen in a glacier that is flowing over the surface
 - C. moving through near-surface pores and fractures
 - D. present as vapor in the atmosphere
 - E. All of the answers are correct.
56. A(n) ____ may eventually be formed as layers of sediment are buried by subsequent layers of sediment.
- A. igneous rock
 - B. metamorphic rock
 - C. sedentary rock
 - D. sedimentary rock
 - E. foliated rock
57. The best geologic data currently available indicate that Earth is approximately ____ years old.
- A. 4,550
 - B. 4,550,000
 - C. 4,550,000,000
 - D. 4,550,000,000,000
 - E. 4,550,000,000,000,000
58. Which of the following lifeforms appeared first in the geologic record?
- A. dinosaurs
 - B. mammals
 - C. plants
 - D. fishes
 - E. reptiles
59. Fossil evidence indicates that complex life forms, capable of generating easily fossilized hard parts like shells or bones, have existed in abundance on Earth since approximately ____ years ago.
- A. 5,440
 - B. 544 thousand
 - C. 544 million
 - D. 5,440,000,000
 - E. 544,000,000,000

60. Fossil evidence indicates that dinosaurs became extinct approximately ____ years ago.
- A. 65 thousand
 - B. 650 thousand
 - C. 6,500,000
 - D. 65 million
 - E. 650,000,000

1 Key

1. We depend on geologists for the raw materials we need for survival.
TRUE
Plummer - Chapter 01 #1
2. Most deaths associated with volcanic eruptions are due to burns or lava flows.
FALSE
Plummer - Chapter 01 #2
3. A tsunami has a small wave height, travels rapidly, and is not noticed by people in boats.
TRUE
Plummer - Chapter 01 #3
4. While the reserves of petroleum hydrocarbons within the United States are limited, other geologic resources (iron, aluminum, copper, and tin) are available in great abundance.
FALSE
Plummer - Chapter 01 #4
5. Geology uses the scientific method to explain natural aspects of the Earth.
TRUE
Plummer - Chapter 01 #5
6. Deeply buried rock that is hot and under pressure can deform like taffy or putty.
TRUE
Plummer - Chapter 01 #6
7. Ocean - ocean plate convergence formed major mountain belts such as the Andes and Cascades.
FALSE
Plummer - Chapter 01 #7
8. The mantle is the most voluminous of Earth's three major concentric zones.
TRUE
Plummer - Chapter 01 #8
9. Earth's lithosphere is made up of the uppermost part of the mantle and crust.
TRUE
Plummer - Chapter 01 #9
10. Understanding geology can help us lessen or prevent damage to the environment.
TRUE
Plummer - Chapter 01 #10
11. Most convergent plate boundaries coincide with the crests of submarine mountain ranges called mid-oceanic ridges.
FALSE
Plummer - Chapter 01 #11
12. Plate tectonics regards the lithosphere as divided into segments (plates) that are in horizontal motion.
TRUE
Plummer - Chapter 01 #12
13. A transform plate boundary occurs where two plates converge.
FALSE
Plummer - Chapter 01 #13
14. Convergent boundaries, due to their geometry, are the sites of the largest earthquakes on Earth.
TRUE
Plummer - Chapter 01 #14

15. After the opening of the North Slope in Alaska the U.S. stopped importing petroleum.
FALSE
- Plummer - Chapter 01 #15*
16. The North American Plate is all on one plate.
TRUE
- Plummer - Chapter 01 #16*
17. Rocks formed at high temperatures and under high pressure deep within the Earth and pushed upward by tectonic force are stable in their new environment.
FALSE
- Plummer - Chapter 01 #17*
18. Rocks brought to the earth's surface by internal processes are worn down, and eroded by surficial processes.
TRUE
- Plummer - Chapter 01 #18*
19. The Earth is about 4.6 billion years old.
TRUE
- Plummer - Chapter 01 #19*
20. The Earth can be considered as interrelated systems or spheres.
TRUE
- Plummer - Chapter 01 #20*
21. The Earth's system that includes the oceans, rivers, lakes, and glaciers of the world is called the _____.
A. biosphere
B. hydrosphere
C. atmosphere
D. geosphere
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- Plummer - Chapter 01 #21*
22. The _____ and the Alpine Fault of New Zealand are examples of transform plate boundaries.
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24. A ____ is a hot, turbulent mixture of expanding gases and volcanic ash that flows rapidly down the side of a volcano.
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B. mud flow
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D. pyroclastic flow
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25. Eruptive activity at the summit of the Nevada del Ruiz volcano in Colombia in 1985 caused snow and ice to melt, generating a ___ that killed 23,000 people in the village of Armero.
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 - B.** mud flow
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Plummer - Chapter 01 #25

26. To understand geology one must understand how the solid Earth interacts with water, air, and living organisms. For this reason, it is useful to think of Earth as being part of a ____.
- A. hydrosphere
 - B.** system
 - C. trend
 - D. group
 - E. formation

Plummer - Chapter 01 #26

27. Among other things, geologists are employed as ___.
- A. petroleum geologists
 - B. environmental geologists
 - C. marine geologists
 - D. hydrogeologists
 - E.** All of the answers are correct.

Plummer - Chapter 01 #27

28. Rock deep within the Earth is _____ and _____.
- A. hot; heat flows inward toward Earth's center.
 - B. cool; heat flows in toward Earth's center
 - C.** hot; heat flows out toward Earth's surface
 - D. the same temperature throughout the earth; heat flow is not an important consideration
 - E. unknown; we can only guess about conditions there

Plummer - Chapter 01 #28

29. Earth's external heat engine is driven by ___.
- A.** solar power
 - B. residual cosmic radiation from the Big Bang
 - C. the decay of radioactive isotopes
 - D. tides
 - E. meteor impacts

Plummer - Chapter 01 #29

30. ___ refer(s) to the scientific study of Earth.
- A. Hydrology
 - B.** Geology
 - C. Spheres

Plummer - Chapter 01 #30

31. The Earth's interior heat engine works because hot buoyant material deep within the Earth _____ while cold denser material _____.
- A.** moves upward; moves downward
 - B. contracts and sinks; expands and rises
 - C. contracts and rises; expands and sinks
 - D. expand and sinks; contract and rises

Plummer - Chapter 01 #31

32. The _____ is the most voluminous of the Earth's three major concentric zones.
A. core
B. mantle
C. lithosphere
D. asthenosphere
E. crust

Plummer - Chapter 01 #32

33. Listed from Earth's center outward, the three concentric zones of Earth are the ____.
A. crust, mantle, core
B. mantle, crust, core
C. core, crust, mantle
D. mantle, core, crust
E. core, mantle, crust

Plummer - Chapter 01 #33

34. A _____ is a scientific concept that has been tested and is in all likelihood true.
A. concept
B. hypothesis
C. theory
D. scenario
E. belief

Plummer - Chapter 01 #34

35. _____ are geological forces generated inside the Earth.
A. Surficial forces
B. Electrochemical forces
C. Tectonic forces
D. Inertial
E. Celestial

Plummer - Chapter 01 #35

36. Earthquakes, volcanic eruptions, landslides, floods, and tsunamis are all examples of:
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B. earth hazards.
C. geologic resources.
D. geospheric processes.
E. geologic hazards

Plummer - Chapter 01 #36

37. The _____ collectively make up the lithosphere.
A. the crust and the whole mantle
B. the crust and the uppermost part of the mantle
C. the crust and asthenosphere
D. the upper and lower mantle
E. the asthenosphere and the upper mantle

Plummer - Chapter 01 #37

38. The _____ is soft and therefore flows more readily than the underlying mantle.
A. crust
B. asthenosphere
C. lithosphere
D. core
E. plate

Plummer - Chapter 01 #38

39. A hypothesis that passes repeated tests ultimately becomes ____.
- A. a guess
 - B. an observation of a phenomenon
 - C. a first, tentative idea to explain a phenomenon
 - D.** a theory
 - E. a proven law of nature

Plummer - Chapter 01 #39

40. After data have been analyzed, tentative explanations or solutions called _____ may be proposed.
- A. a guess
 - B. an observation of a phenomenon
 - C.** a hypotheses
 - D. a concept that has been tested reproducibly and is likely to be true
 - E. a proven law of nature

Plummer - Chapter 01 #40

41. Plate tectonics is a unifying idea that helps explain where and why there are ____ on Earth.
- A. earthquakes
 - B. volcanoes
 - C. mountain belts
 - D. oceanic ridges and trenches
 - E.** All of the answers are correct.

Plummer - Chapter 01 #41

42. The two major types of crust are oceanic crust and ____.
- A.** continental crust
 - B. lithosphere
 - C. convergent crust
 - D. thin crust

Plummer - Chapter 01 #42

43. What is Earth's external heat engine?
- A. geothermal power
 - B.** solar power
 - C. All of Earth's heat is generated internally.

Plummer - Chapter 01 #43

44. The concept of plate tectonics regards the earth's ____ as broken into a number of ____ that are in motion relative to each other.
- A. crust; plates
 - B. mantle; plates
 - C. asthenosphere; plates
 - D.** lithosphere; plates
 - E. plates; lithosphere

Plummer - Chapter 01 #44

45. A _____, by scientists definition, is something that has been overwhelmingly verified.
- A. hypothesis
 - B. guess
 - C. prediction
 - D.** theory

Plummer - Chapter 01 #45

46. Plates are known to be moving away from each other ____.
- A. across mountain ranges like the Himalayan Mountains
 - B. across subduction zones
 - C.** across mid-ocean ridges
 - D. across the stable interior of continents
 - E. along transform faults

Plummer - Chapter 01 #46

47. A _____ boundary occurs where plates move toward one another.
A. convergent
B. concurrent
C. rift
D. abutting
E. transform

Plummer - Chapter 01 #47

48. The _____ of old seafloor takes place at convergent boundaries.
A. destruction
B. creation
C. production
D. erosion
E. extinction

Plummer - Chapter 01 #48

49. The North American plate is moving _____.
A. north
B. south
C. west
D. east
E. nowhere, it's fixed

Plummer - Chapter 01 #49

50. Where a subducting plate slides beneath the lithosphere, melting takes place and a(n) _____ is created.
A. plate
B. ocean trench
C. seamount
D. sedimentary rock
E. coral reef

Plummer - Chapter 01 #50

51. Sedimentary rock that becomes deeply buried may be transformed by heat and pressure into _____ rock.
A. soil
B. igneous
C. granite
D. metamorphic
E. All of the answers are correct.

Plummer - Chapter 01 #51

52. The product of the breakdown of surface rocks by weathering and erosion is _____.
A. lava
B. magma
C. sediment
D. quartz
E. ash

Plummer - Chapter 01 #52

53. With the cementation of loose particles sediment becomes _____.
A. molten
B. metamorphic
C. lithified
D. igneous
E. basalt

Plummer - Chapter 01 #53

54. _____ takes place where moving water, ice, and wind loosen and remove material on the continents.
- A. Burial
 - B. Metamorphism
 - C. Melting
 - D. Subsidence
 - E. Erosion**

Plummer - Chapter 01 #54

55. Disintegration of rock at Earth's surface may be facilitated by water ____.
- A. flowing on the surface in streams and as runoff
 - B. frozen in a glacier that is flowing over the surface
 - C. moving through near-surface pores and fractures
 - D. present as vapor in the atmosphere
 - E. All of the answers are correct.**

Plummer - Chapter 01 #55

56. A(n) ____ may eventually be formed as layers of sediment are buried by subsequent layers of sediment.
- A. igneous rock
 - B. metamorphic rock
 - C. sedentary rock
 - D. sedimentary rock**
 - E. foliated rock

Plummer - Chapter 01 #56

57. The best geologic data currently available indicate that Earth is approximately ____ years old.
- A. 4,550
 - B. 4,550,000
 - C. 4,550,000,000**
 - D. 4,550,000,000,000
 - E. 4,550,000,000,000,000

Plummer - Chapter 01 #57

58. Which of the following lifeforms appeared first in the geologic record?
- A. dinosaurs
 - B. mammals
 - C. plants
 - D. fishes**
 - E. reptiles

Plummer - Chapter 01 #58

59. Fossil evidence indicates that complex life forms, capable of generating easily fossilized hard parts like shells or bones, have existed in abundance on Earth since approximately ____ years ago.
- A. 5,440
 - B. 544 thousand
 - C. 544 million**
 - D. 5,440,000,000
 - E. 544,000,000,000

Plummer - Chapter 01 #59

60. Fossil evidence indicates that dinosaurs became extinct approximately ____ years ago.
- A. 65 thousand
 - B. 650 thousand
 - C. 6,500,000
 - D. 65 million**
 - E. 650,000,000

Plummer - Chapter 01 #60

1 Summary

<u>Category</u>	<u># of Questions</u>
Plummer - Chapter 01	60