**Test Taking Tips:**

* Read each question carefully
* Circle/Highlight key words
* Visualize the question in your head
* Draw pictures beside the questions and answer choices
* Use process of elimination
* Choose the BEST answer choice
* Do the easy questions first
* Check your work
1. The diagram below shows the collision of two tectonic plates in Asia.



What is a result of this collision?

1. Volcanoes erupt periodically
2. The Tibetan Plateau slowly sinks
3. The Himalayas increase in height each year
4. Glaciers on the Tibetan Plateau melt
5. The theory of plate movement and how the continents moved apart over time is called
	1. Plate tectonics
	2. Geology
	3. Continental tectonics
	4. Biology
6. The middle layer of the Earth is the
	1. Mantle b. crust c. core
7. The crust is the hottest layer of the Earth.
	1. True b. false
8. When plates collide into each other, this event causes \_\_\_\_\_\_\_ to form
	1. Earthquakes c. continents
	2. Mountains d. hurricanes
9. The continents on Earth used to be combined together, and the supercontinent was called Pangaea.
	1. True b. false
10. What are the three major types of rocks?
	1. Solid, liquid, gas
	2. Igneous, sedimentary, limestone
	3. Sedimentary, igneous, metamorphic
	4. Lava, magma, mantle
11. Erosion occurs when sediment is moved by wind, ice, or moving water.
	1. True b. false
12. Molten rock that flows from a volcano onto earth’s surface is
	1. Lava c. sediment
	2. Magma d. sand
13. A shaking of earth’s surface, caused by movement of rock in the crust is a
	1. Volcano c. earthquake
	2. Sinkhole d. jetty
14. What changes can occur in a rock cycle?
	1. Heat and pressure
	2. Cooling and weathering
	3. Erosion
	4. All of the above
15. Plates that move apart are called
	1. Convergent boundaries
	2. Divergent boundaries
	3. Transform boundaries
	4. Colliding plate boundaries
16. What is a fault?
	1. The point inside Earth at which an earthquake occurs
	2. The point on Earth’s surface directly above the earthquake focus
	3. A fracture in Earth along with movement has occurred
	4. A fracture in Earth along with NO movement has occurred
17. Some rocks are pushed deeper into the Earth. As these rocks experience greater heat and pressure, what type of rock will they turn into if they do not melt?
	1. Igneous c. molten
	2. Sedimentary d. metamorphic
18. Farmers can protect soil quality by \_\_\_\_\_ and \_\_\_\_\_
	1. Rotating crops; avoiding overgrazing
	2. Growing the same crop each year; watering during the winter
	3. Fertilizing heavily; grazing livestock on limited parcels of land
	4. Compacting soil; letting fields lie unused
19. When rocks return to the Earth’s mantle, they can eventually melt and become magma. \_\_\_\_\_ and \_\_\_\_ are the main factors that control this change.
	1. Contraction; expansion
	2. Erosion; weathering
	3. Pressure; heat
	4. Friction; cold
20. What is often formed when two continental plates collide?
	1. Islands c. craters
	2. Mountains d. volcanoes
21. \_\_\_\_\_\_\_\_\_ rock is formed when debris is buried, compressed and cemented together.
	1. Metamorphic c. magma
	2. Igneous d. sedimentary
22. What causes events such as earthquakes, volcanic eruptions, and the creation of mountains?
	1. position of planets
	2. Ocean tides
	3. lithospheric plate movement
23. Contour plowing is the process of growing crops along the contours of a hill. What benefits does this type of farming have?
	1. It helps farmer to harvest more quickly
	2. It helps protect the plants during freezing weather
	3. It helps the plants grow more uniformly
	4. It helps slow water run-off and prevent soil erosion
24. What is the name for the process of recycling materials that make up the earth’s crust and mantle?
	1. Carbon cycle c. water cycle
	2. Nitrogen cycle d. rock cycle
25. Earth’s surface is constantly changing. Volcanoes erupt and form new crust. Lithospheric plate motions bend and crack old crust and cause earthquakes. Where do most of the Earth;s earthquakes and volcanoes occur?
	1. At the center of continental plates
	2. Along plate boundaries
	3. At the equator
	4. Along hot spots in oceanic crust
26. Which of the following can negatively impact soil quality?
	1. Careful ranching practices
	2. Improper disposal of chemicals
	3. Vegetation
	4. Crop rotation
27. Lithospheric plates the size of continents and oceans are constantly moving as a result of activity in the Earth’s mantle. Approximately how fast do these plates move?
	1. A few meters per year
	2. A few hundred kilometers per year
	3. A few kilometers per year
	4. A few centimeters per year
28. What are the two main factors in the mantle that contribute to the rock cycle?
	1. Layering & pressure c. pressure & heat
	2. Weathering & layering d. heat & weathering
29. Which of the following is an example of stewardship towards the environment?
	1. Helping find a lost dog
	2. Pouring unused medicine down the drain
	3. Volunteering to help plant trees
	4. Giving money to charities
30. Earth’s lithospheric plates
	1. Are constantly in motion c. move once
	2. Move only up and down d. do not move
31. Which type of rock contains minerals arranged in crystals and forms when molten rock cools and turns solid?
	1. Sedimentary rock c. fossilized rock
	2. Metamorphic rock d. igneous rock
32. Soil conservation involves protecting \_\_\_\_\_ and preventing \_\_\_\_\_\_
	1. Topsoil; pollution c. soil layers; pollution
	2. Soil quality; erosion d. soil layers; erosion
33. The point inside the Earth where an earthquake actually begins is called the \_\_\_\_ of the earthquake.
	1. Fault c. epicenter
	2. Focus d. seismic wave
34. The buildup and release of stress along a \_\_\_ causes most earthquakes
	1. Mountain range c. fault
	2. Volcano d. crustal plate
35. The bending of rock layers due to stress is known as
	1. Faulting c. divergence
	2. Folding d. convergence
36. When tension pulls rocks apart, it creates a
	1. Normal fault c. reverse fault
	2. Mid-ocean ridge d. strike-slip fault
37. When opposing forces cause rock to break and move horizontally, they create a
	1. Normal fault c. reverse fault
	2. Fold d. strike-slip fault
38. What is seismology? The study of earthquakes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
39. Seismic waves that travel through earth’s interior are
	1. Surface waves c. earth waves
	2. Body waves d. secondary waves
40. Which of the following is the fastest type of seismic wave?
	1. Surface waves c. S waves
	2. Body waves d. P waves
41. Which of the following is another name for S waves?
	1. Secondary waves c. surface waves
	2. P waves d. primary waves
42. Another name for a pressure wave is
	1. Convergent wave c. primary wave
	2. Surface wave d. secondary wave
43. What is the branch of science in which earthquakes are studied?
	1. Earthquake science c. seismology
	2. Tectonics d. wave science
44. How are surface waves different from body waves?
	1. They are more destructive
	2. They travel faster
	3. They travel through the inside of Earth
	4. They are secondary waves
45. \_Fault\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the change in shape of rock due to stress.
46. \_P waves (pressure/primary waves)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ always travel ahead of other waves.
47. The point on Earth’s surface directly above an earthquake’s starting point
	1. Seismograph c. seismogram
	2. Epicenter d. focus
48. Instrument that records vibrations in the ground and determines the location and strength of an earthquake
	1. Seismograph c. seismogram
	2. Epicenter d. focus
49. Tracing of earthquake motion that is detected by a seismograph
	1. Seismograph c. seismogram
	2. Epicenter d. focus
50. The point in earth’s interior where an earthquake begins
	1. Seismograph c. seismogram
	2. Epicenter d. focus
51. What do seismologists use to measure earthquake strength? \_\_\_\_Richter Scale\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
52. Most earthquakes occur along the edges of
	1. Tectonic plates c. seismic gaps
	2. Wave boundaries d. epicenters
53. New oceanic lithosphere forms as a result of
	1. Sea-floor spreading c. normal polarity
	2. Reverse polarity d. continental drift

Read each definition in each box. Write the vocabulary word that matches its definition.

**Word Bank: normal fault, rock cycle, strike-slip fault, surface waves, erosion, transform boundary, seismologist, plate boundary, divergent, sedimentary, metamorphic, lithosphere, S wave, compaction, fault, epicenter, reverse fault, continental drift, Pangaea, deposition, asthenosphere, P wave, folding, seismology, igneous rock, compression, seismograph, focus, weathering, seismogram, seismic wave, convergent, mesosphere**

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| --- | --- | --- | --- | --- | --- |
| Solid layer of the mantlemesosphere | Two tectonic plates collideconvergent | 2 tectonic plates separatedivergent | Fault when rock moves horizontallyStrike-slip | A break in rock that is due to stressfault | A wave of energy that travels through the earth (body waves)Seismic waves |
| A scientist who studies earthquakesseismologist | Layers of sediment are pressed and cemented togethersedimentary | Rocks push togethercompression | Rocks pull away from each othertension | Fault when rocks are pulled apartnormal | Continents as one single landmassPangaea |
| New oceanic lithosphere forms as magma rises to the surfaceSea-floor spreading | Soft layer of the mantle (plastic)asthenosphere | The crust and upper mantle lithosphere | Magma or lava that has cooled and solidifiedIgneous rock | The study of earthquakesseismology | 2 tectonic plates slide past each other horizontallytransform |
| A tracing of earthquakes motionseismogram | The process of when a rock changes because of stressDeformation | Sediments that have compacted over timecompaction | Heat and pressure change the rockmetamorphic | Moves along earth’s surface slowly more destructiveSurface waves | Wind, water, or gravity transport soil and sediment from one location to anothererosion |
| Water, wind, ice and heat break down rockweathering | A place where tectonic plates touchboundary | Fastest move back and forth (pressure/primary waves)P waves | Rock that melted under intense heat and pressuremetamorphic | Hypothesis that states that the continents once formed a single landmassContinental drift | The point on the earth’s surface directly above an earthquake’s starting pointepicenter |
| Sudden, violent shaking of the earthearthquake | The continual process by which new rock forms from old rockRock cycle | Sediment is deposited in bodies of waterdeposition | Fault when rocks are pushed togetherReverse fault | Second fastest, moves from side to side (shear/secondary)S wave | Used to record vibration in earth and determines the strength of the earthquakeseismograph |
| Bends in rock that are the results of heat and pressurefolding | The point inside the earth where the earthquake beginsfocus |  |  |  |  |