

Name: _____ Date: _____

1. The Moon's orbital plane is inclined to Earth's orbital plane by
 - a. 0° .
 - b. 5° .
 - c. 23.5° .
 - d. 30° .

2. When a meteor strikes Earth's surface, it is called a(n) _____.
 - a. asteroid
 - b. star
 - c. planet
 - d. meteorite
 - e. ball

3. A high tide is occurring at Charleston, South Carolina (45°W , 64°N). Which listed longitude is experiencing a low tide occurring?
 - a. 135°E
 - b. 65°E
 - c. 45°E
 - d. 45°W
 - e. 145°W

4. Short-period comets, such as Halley's comet, are believed to come from _____.
 - a. the Kuiper Belt
 - b. the Oort cloud
 - c. the asteroid belt
 - d. Earth

5. Moonquakes are believed to have caused the Moon's
 - a. rays.
 - b. craters.
 - c. rills
 - d. plains (maria).

6. The first-quarter Moon sets at approximately
 - a. midnight.
 - b. noon.
 - c. 6 P.M.
 - d. 6 A.M.

7. The asteroid belt is between the orbits of

- a. Earth and Mars.
- b. Mars and Jupiter.
- c. Earth and Venus.
- d. Jupiter and Saturn.

8. Eighty-eight prominent groups of stars in the sky are called the _____.

- a. constellations
- b. local groups
- c. clusters
- d. galaxies

9. Which of the following has the most moons?

- a. Mercury
- b. Venus
- c. Earth
- d. Mars

10. The Sun is

- a. a self-luminous sphere.
- b. energized by nuclear fusion.
- c. a plasma.
- d. all of the above.

11. The celestial prime meridian is an imaginary half-circle running from the north celestial pole to the south celestial pole and crossing perpendicular to the celestial equator at the point of the

- a. autumnal equinox.
- b. summer solstice.
- c. vernal equinox.
- d. winter solstice.

12. Spring tides occur close to the time of _____ moon.

- a. the new
- b. the first-quarter
- c. both the new and the full
- d. the last-quarter

13. In a star, the balance between the inward force of gravity and the outward force of thermal and radiation pressure is called
- the neutrino bonding point.
 - hydrostatic equilibrium.
 - the plasma equality condition.
 - strong nuclear binding.
14. The Andromeda Galaxy (M31) is what type?
- Spiral
 - Irregular
 - Elliptical
 - Regular spiral
15. Six trillion miles is equivalent in distance to one _____.
16. An incredibly dense star so massive that light cannot escape from its surface is called a(n) _____.
17. The next phase in the life cycle of the Sun will be
- the formation of a red giant.
 - a move to the main sequence.
 - collapse to a white dwarf.
 - a supernova explosion.
18. A(n) _____ is denser than a neutron star.
19. About 80% of the mass of the atmosphere and most of the clouds and water vapor are located in the
- stratosphere.
 - troposphere.
 - mesosphere.
 - thermosphere.
20. Some of Earth's artificial satellites orbit in the
- stratosphere.
 - troposphere.
 - mesosphere.
 - thermosphere.
 - exosphere.

21. The ozone layer causes a temperature increase in the

- a. thermosphere.
- b. mesosphere.
- c. troposphere.
- d. stratosphere.

22. Cloud dissipation results from

- a. an inverted lapse rate.
- b. hygroscopic nuclei.
- c. supercooled vapor.
- d. descending air.

23. Relative humidity is measured with a(n) _____.

24. The inventor of the mercury barometer was

- a. Newton.
- b. Galileo.
- c. Bergeron.
- d. Torricelli.

25. A line drawn through locations of equal atmospheric pressure is a(n)

- a. equipress.
- b. anemometer.
- c. wind vane.
- d. isobar.

26. Clouds described as “artist's brushes” or “mare's tails” belong to what cloud family?

- a. Middle
- b. Low
- c. High
- d. None of these

27. Vertical air movements are referred to as _____.

28. An *El Niño* usually results in

- a. more rainfall for South America.
- b. warmer water in the western Pacific.
- c. less rainfall for Australia.
- d. all of the above.
- e. none of the above.

29. The dome of water associated with a hurricane making landfall is called a

- a. storm surge.
- b. tide.
- c. tidal wave.
- d. flood.

30. Lightning damage comes chiefly from _____ discharge.

- a. intracloud
- b. air
- c. cloud-to-cloud
- d. cloud-to-ground

31. A class of pollutants formed at high temperatures (nearly complete combustion) in the presence of air is

- a. sulfur oxides.
- b. carbon oxides.
- c. iron oxides.
- d. nitrogen oxides.

32. A form of precipitation that results from convection cycles in clouds is

- a. sleet.
- b. rain.
- c. hail.
- d. fog.

33. The greatest cause of hurricane deaths is

- a. the storm surge.
- b. panic.
- c. the eye.
- d. high winds.

34. The pollutant primarily responsible for acid rain is

- a. NO₂.
- b. CO₂.
- c. O₃.
- d. SO₂.

35. Lightning between a cloud and the surrounding air is called _____.

36. Flashes from unseen lightning are called _____.

37. Which of the following is *not* one of the three types of plate boundaries?

- a. Diverging
- b. Converging
- c. Fault-block
- d. Transform

38. S waves and P waves are earthquake body waves. S and P stand for

- a. sudden and post.
- b. sigma and pi.
- c. slow and proper.
- d. secondary and primary.

39. Earth's continental crust ranges in thickness from about

- a. 98 to 140 km.
- b. 19 to 40 km.
- c. 5 to 26 km.
- d. 8 to 16 km.

40. The lowest places on Earth's surface are called _____ trenches.

41. What type of faulting results from compressional stresses?

- a. Reverse
- b. Abnormal
- c. Strike-slip
- d. Normal

42. The lowest places on Earth's surface are called _____ trenches.

- a. plateau
- b. mid-oceanic
- c. deep-sea
- d. none of these

43. When an earthquake occurs, the location on Earth's surface above the point of initial energy release is called the earthquake's

- a. fault line.
- b. focus.
- c. epicenter.
- d. none of the above.

44. Another name applied to the grain size in a rock is
- specific gravity.
 - porosity.
 - texture.
 - streak.
45. When an earthquake occurs, the location on Earth's surface above the point of initial energy release is called the earthquake's _____.
46. The _____ scale gives an absolute measure of the energy released by an earthquake.
47. Rocks solidified from molten material above ground are classified as _____ igneous rocks.
- extrusive
 - intrusive
 - superior
 - inferior
48. A common scale for denoting a mineral's hardness is the
- Ores scale.
 - Mohs scale.
 - Homs scale.
 - Ohms scale.
49. Which igneous rock has light color (high silica content) and large grains (coarse texture)?
- Gabbro
 - Granite
 - Rhyolite
 - Basalt
50. Which of the following is *not* a metamorphic rock?
- Sandstone
 - Schist
 - Slate
 - Marble
51. A(n) _____ is a cohesive aggregate of one or more minerals.

52. The sedimentary rock known as _____ consists of deposits of calcium carbonate (calcite).
53. The chemical alteration of preexisting rocks by chemically reactive, hot-water solutions is called _____ metamorphism.
54. A river's suspended and bed loads may accumulate at its mouth and form
- a delta.
 - a meander.
 - a stream.
 - none of the above.
55. An important agent in chemical weathering is
- carbonic acid.
 - permafrost.
 - wind.
 - frost.
56. By which of the following characteristics is a desert defined?
- High winds
 - High temperature
 - Lack of precipitation
 - Hot days and cold nights
57. A(n) _____ is the surface expression of magma that originates in the asthenosphere and deeper.
58. A material's capacity to transmit fluids is called its
- permeability.
 - solifluction.
 - drift.
 - porosity.
59. The formation of which of the following is *not* directly caused by erosive wave action?
- Wave-cut cliffs
 - Sea stacks
 - Pocket beaches
 - Sea caves
60. _____ is the downslope movement of surface materials as a result of gravity and of the agents that cause such movement.

61. Regions on Earth that have the driest climates are known as _____.

62. Collapsed cavern ceilings can cause _____ to appear on the land's surface.

63. The oldest evidence of life on Earth dates back to about how many years ago?

- a. 65 million
- b. 3.8 million
- c. 3500 million
- d. 570 million

64. A number of epochs is called a(n)

- a. eon.
- b. period.
- c. millennia.
- d. era.

65. The Quaternary is a(n)

- a. epoch.
- b. era.
- c. eon.
- d. period.

66. Earth's second largest ocean is the _____ Ocean.

67. Starting with a sample of pure parent radionuclide, what would be the ratio of the parent radionuclide to its daughter after one half-life has elapsed?

- a. 1 to 1
- b. 1 to 2
- c. 1/2 to 1
- d. 2 to 1

68. In which of the following eons do we live?

- a. Phanerozoic
- b. Hadean
- c. Proterozoic
- d. Archean

69. Which occurrence is associated with the demise of the dinosaurs?

- a. The Great Dying
- b. The Cambrian explosion
- c. The breakup of Pangaea
- d. The K-T event

70. The Petrified National Forest is found in the state of _____.

71. We live in the _____ eon.

72. The actual age of rock layers and geologic events is referred to as _____ geologic time.