Earth-Space Science Mr. Waddell Semester 2 Final Practice

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. Earth's atmosphere contains more ____ than any other substance.
a. hydrogen and nitrogen
b. helium and oxygen
c. nitrogen and oxygen
d. carbon and nitrogen

____ 2. When the temperature in the atmosphere reaches the ____, condensation occurs.
a. flash point
b. dew point
c. evaporation point
d. inversion point

____ 3. In orographic lifting, clouds form when moist winds ____.
a. flow over the sea
b. become drier
c. encounter mountains
d. warm up the ground

____ 4. What is the constant movement of water between the atmosphere and Earth's surface?
a. precipitation cycle
b. water cycle
c. cloud cycle
d. atmosphere cycle

____ 5. The hot and humid weather in Texas during the summer is most likely due to what type of air mass?
a. Continental polar
b. Continental tropical
c. Maritime polar
d. Maritime tropical

____ 6. Frigid air that travels southward from Canada would be what type of air mass?
a. Continental polar
b. Continental tropical
c. Maritime polar
d. Arctic

____ 7. Current, short-term variations in the atmosphere are referred to as ____.
a. humidity
b. lapse rate
c. weather
d. the ionosphere

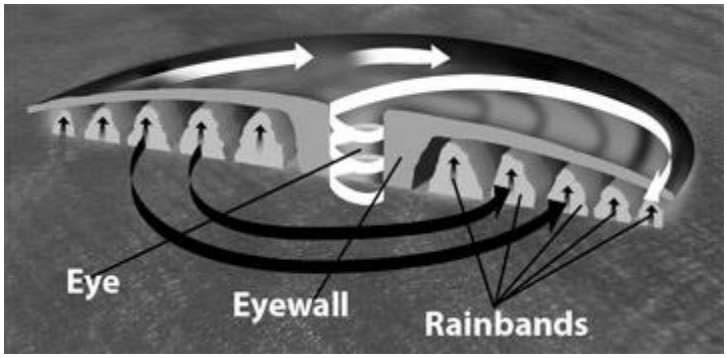
____ 8. The Coriolis effect is due to the ____ of Earth.
a. revolution
b. rotation
c. shape
d. density

____ 9. Low-pressure systems are usually associated with ____ weather.
a. cold and dry
b. cloudy and rainy
c. sunny and dry
d. warm and humid

____ 10. Which is NOT a condition that must exist in order to produce a thunderstorm?
a. a source of moisture
b. lifting of the air mass
c. an unstable atmosphere
d. a source of wind

____ 11. In what stage of a thunderstorm would an equal amount of updrafts and downdrafts exist?
a. cirrus stage
b. cumulus stage
c. mature stage
d. dissipation stage

____ 12. What ultimately leads to a thunderstorm's dissipation?
a. the production of downdrafts
b. the loss of a supply of cold air
c. the decrease in cloud droplets
d. the decrease of surface winds



Use the diagram to answer the questions.

____ 13. At which point would the strongest winds and densest clouds of the hurricane be located?
a. the eye
b. the eyewall
c. the rainbands
d. the outer edge

____ 14. What is characteristic of the eye of the hurricane?
a. the strongest winds and densest clouds
b. thunderstorms
c. light clouds and precipitation
d. calm weather and blue sky

____ 15. A(n) ____ thunderstorm forms because of unequal heating of Earth's surface within one air mass.
a. frontal mass
b. cold front
c. air mass
d. air pressure

____ 16. The rising, moist updrafts and the falling, cool downdrafts form a convection cell that produces the ____ associated with thunderstorms.
a. temperatures
b. thunder
c. humidity
d. gusty surface winds

____ 17. When friction between updrafts and downdrafts within a cumulonimbus cloud creates regions of air with opposite charges, ____ forms.
a. warm air
b. lightning
c. precipitation
d. ozone

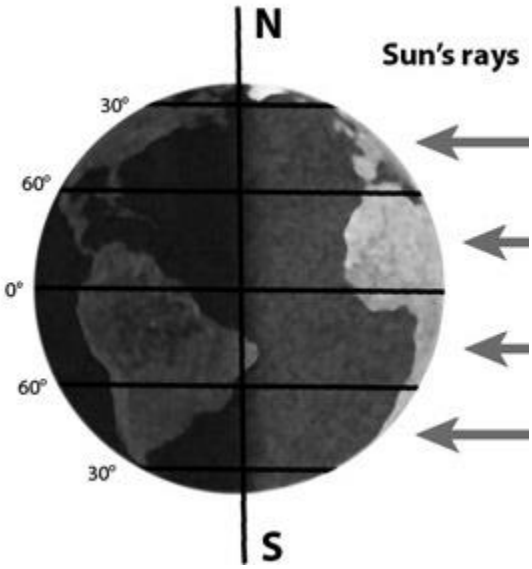
____ 18. ____ are often associated with very severe thunderstorms called supercells.
a. Tornadoes
b. Sea breezes
c. Hurricanes
d. Heat waves

____ 19. What did Wladimir Köppen originally use to classify different climatic regions?
a. precipitation amounts
b. average temperature
c. unique animal species
d. natural vegetation

Use the pictures to answer the questions. (Note: the four scenes are all in the same area.)

____ 20. Which picture would most likely produce a heat island?
a. suburbs
c. park

b. city
d. farmland



Use the diagram to answer the questions.

____ 21. As the Earth revolves and the North Pole tilts towards the Sun, what season would the southern hemisphere experience?
a. winter
b. spring
c. summer
d. fall

____ 22. As the Earth continues to revolve, which location will experience the least climate change?
a. 0°
b. 30°N
c. 30°S
d. 60°N

____ 23. A widely used climate classification system is the ____ system.
a. Maunden
b. Topographic
c. Koeppen
d. Korten

____ 24. Studies indicate that periods of low sunspot activity, like the ____, correspond to unusually cold climate conditions.
a. Maunder minimum
b. Maunder ice age
c. Maunder divide
d. Maunder maximum

____ 25. Two climates that are at the same latitude may be different because of ____.
a. bodies of water
b. distance from the poles
c. Earth's magnetic field
d. soil type

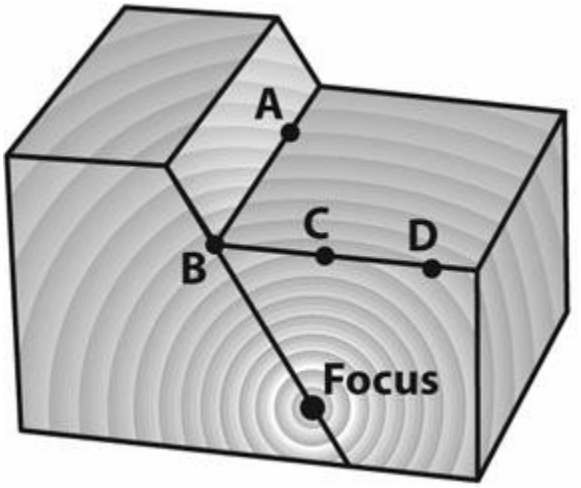
____ 26. Movement occurs along fractures in rocks when _____.
a. stress equals the strength of the rocks involved
b. stress overcomes the strength of the rocks involved
c. stress is applies to the rocks involved
d. stress is less than the rocks involved

____ 27. The strain which causes a material to twist is known as ____.
a. stress
c. tension

b. compression
d. shear

____ 28. The strain which causes a material to pull apart is known as ____.
a. stress
b. compression
c. tension
d. shear

____ 29. P-waves and S-waves are also known as ____.
a. surface waves
b. ground waves
c. body waves
d. first waves



Use the diagram to answer the questions.

____ 30. What is true about the focus?
a. It is the point where the most surface damage will occur.
b. It is the point where the surface waves originate and spread out.
c. It is the point where the waves are attracted.
d. It is the point of failure where the waves originate.

____ 31. A ____ fault forms as a result of horizontal compression.
a. blind
b. normal
c. strike-slip
d. reverse

____ 32. The San Andreas Fault, a result of horizontal shear, is a ____ fault.
a. blind
b. normal
c. strike-slip
d. reverse

____ 33. A numerical scale of earthquake magnitude that takes into account the size of the fault rupture is the ____.
a. Richter scale
b. modified Mercalli scale
c. moment magnitude scale
d. epicentral distance scale

____ 34. Which lists Earth materials in order of increasing density?
a. oceanic crust, continental crust, mantle
b. mantle, oceanic crust, continental crust
c. continental crust, oceanic crust, mantle
d. continental crust, mantle, oceanic crust

____ 35. Subduction zones form at _____.

a. only oceanic-oceanic boundaries
b. only oceanic-continental boundaries
c. both oceanic-oceanic boundaries and oceanic-continental boundaries
d. neither oceanic-oceanic boundaries or oceanic continental boundaries

____ 36. A good model for isostasy is ____.
a. a collision between two cars
b. the water line of a boat when someone boards or leaves it
c. scraping food off a plate
d. stretching a cracked, old rubber band

____ 37. Uplifted mountains ____.
a. form when a large region of Earth's crust rises up as a unit
b. have rocks that are not very deformed
c. are the result of erosional forces
d. all of the above

____ 38. Fault-block mountains ____.
a. form when two continental plates collide
b. form above a subduction zone
c. form when a large pieces of crust are dropped between large faults
d. all of the above

____ 39. The Himalayas formed as the result of ____.
a. hot spot volcanism
b. divergence on the ocean floor
c. continental-continental convergence
d. oceanic-oceanic convergence

____ 40. What force draws the matter in an interstellar cloud together to form a star?
a. electric
b. gravity
c. magnetism
d. friction

____ 41. What is the main reason why Venus' surface is so hot?
a. the large number of volcanoes on Venus
b. the very efficient greenhouse effect on Venus
c. the extremely fast rotation of Venus
d. the great amount of water on Venus

____ 42. Bodies of interplanetary debris that orbit the Sun with most in the area between Mars and Jupiter are called ____.
a. meteors
b. comets
c. asteroids
d. meteorites

____ 43. Small, icy bodies that have highly eccentric orbits and can be found in the Oort cloud or the Kuiper belt are called ____.
a. meteors
b. comets
c. asteroids
d. meteorites

____ 44. Interplanetary material that enters the Earth's atmosphere and collides with the ground rather than burning up is called a(n) ____.
a. meteor
b. comet
c. asteroid
d. meteorite

____ 45. What two gas giants appear blue because of the methane in their atmosphere?

a. Jupiter and Saturn
b. Saturn and Uranus
c. Neptune and Uranus
d. Jupiter and Neptune

____ 46. The result when Earth intersects a cometary orbit is a(n) ____.
a. asteroid shower
b. aurora borealis
c. loss of satellite communication
d. meteor shower

____ 47. Which planet has composition and density most similar to the Sun?
a. Saturn
b. Mars
c. Mercury
d. Venus

____ 48. Most of the light emitted by the Sun comes from the ____.
a. chromosphere
b. corona
c. photosphere
d. prominence

____ 49. The apparent shift in a star's position caused by the motion of the observer is called ____.
a. luminosity
b. apparent magnitude
c. absolute magnitude
d. parallax

____ 50. A star that is gravitationally bound to another star can either be part of a star cluster or a ____ star.
a. constellation
b. white dwarf
c. binary
d. red giant

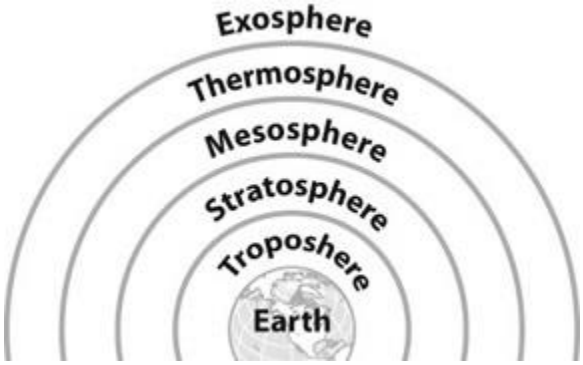
____ 51. The Milky Way and the Andromeda are both_____.
a. stars
b. galaxies
c. nebulae
d. quasars

____ 52. Other galaxies were first believed to be ____.
a. nebulae or star clusters within the Milky Way
b. quasars outside the Milky Way
c. constellations within the Milky Way
d. the Andromeda galaxy

____ 53. Recent observations show that the rate of expansion of the universe is ____.
a. slowing down
b. stabilizing
c. constantly changing
d. speeding up

Matching

Match the correct atmospheric layer with its description.



a. Troposphere
b. Stratosphere
d. Thermosphere
e. Exosphere

c. Mesosphere

____ 54. also contains the ionosphere

____ 55. contains the ozone layer

____ 56. considered a transitional region

____ 57. where weather occurs

____ 58. temperatures decrease due to very little solar radiation absorption

Earth-Space Science Mr. Waddell Semester 2 Final Practice
Answer Section

MULTIPLE CHOICE

1. C
2. B
3. C
4. B
5. D
6. A
7. C
8. B
9. B
10. D
11. C
12. A
13. B
14. D
15. C
16. D
17. B
18. A
19. D
20. B
21. A
22. A
23. C
24. A
25. A
26. B
27. D
28. C
29. C
30. D
31. D
32. C
33. C
34. C
35. C
36. B
37. D
38. C
39. C
40. B

41. B
42. C
43. B
44. D
45. C
46. D
47. A
48. C
49. D
50. C
51. B
52. A
53. D

MATCHING

54. D
55. B
56. E
57. A
58. C