

1) What is a characteristic that is least likely of an early Earth life form a) needed CO_2 b) needed O_2

2) How does the radiant energy from the sun change when it hits Earth's surface? A) wavelengths are longer b) wavelengths are shorter

3) What reaction occurs in the sun? H \rightarrow He b) Fe \rightarrow He

4) What detrimental affect do temperature inversions cause? A) high humidity b) smog

5) Radiation from the sun is used by? A) fungi b) grass

6) An increase in which of the following will increase the greenhouse effect? A) gasoline exhaust b) nuclear power

7) 99% of the earth's air is? A)
Nitrogen and oxygen b)
oxygen and CO₂

8) What is the source of most of
the solar energy that keeps
earth warm? A) fusion of
hydrogen in the sun b)
burning of oxygen

9) How did oxygen form in our
atmosphere? A) Volcanic
explosions b) photosynthesis
by plants

10) What is true about the gas planets? A) they are more dense than the inner planets
b) less dense are farther from the sun

11) A hot air balloon rises through the troposphere and:
a) temp and pressure increase
b) temp and pressure decrease

12) What source of energy drives Hadley cells and air

masses a) rapid rotation of earth b) stronger heating at earth's surface near the equator

13) What graph depicts a temperature inversion (see board)

14) What happens during a sea breeze ? see board

15) Why does carbon dioxide increase during the winter and decrease during the summer

a) plants absorb more CO₂ during summer B) plants absorb less CO₂ during summer

16) What changes occur at mid latitude locations a) earth's axis is perpendicular to the earth b) earth's axis is parallel to the sun

17) After a star goes through a supernova explosion it cannot be seen through a visible

telescope because a)
electromagnetic waves are
invisible b) too small to be
visible

18) More sunlight is absorbed
at a) surface b) clouds

19) oxidation occurred after
2.3 billion years ago. So what
was not in the atmosphere
previous to that time a)
nitrogen b) oxygen

20) The sun is redder at sunset and bluer at sunrise, why?

Electromagnetic travel faster in the morning and slower in the afternoon.

21) what factor has the most significance on the atmosphere a) development of CO₂ b) development of Oxygen

22) What is the ozone layer

a) absorbs greenhouse gases

b) reflects ultraviolet light

23) water vapor, CO₂ ,

nitrogen were released into

the atmosphere by?

a) gases that dissolved in rock

from volcanoes

b) dead plants released these

gases

24) what is the best method to test for humidity and precipitation?

a) record humidity and precipitation levels for one year and compare them

b) observe how humidity and water vapor change over several days

25) what evidence shows that greenhouse gases are increasing?

a) Increased amounts of methane around the world

b) worldwide climates are getting warmer

26) What do CFCs do to the atmosphere?

a) thickens the ozone layer

b) puts holes in the ozone layer

27) Our Solar system is located?

a) on a spiral arm in the milky way

b) in a nuclear bulge in the milky way

28) how did our galaxy form ?

a) giant cloud of dust and gas collapsed

b) when the big bang occurred

29) A glacier has moved over time and are getting smaller which indicates that?

a) climate change is occurring

b) Alaska is not getting warmer

30) a large red star with a mass equal to the sun will

a) is older than our sun

b) is younger than our sun

31) winds in the southern hemisphere curve to the?

a) east b) west

32) what would affect the greenhouse effect?

a) amount of CO_2 produced

b) amount of manufacturing

33) Which diagram demonstrates global heating of the oceans (see board)

34) what does the milky way look like?

35) what layer of the atmosphere is the ozone layer?

a) stratosphere b)
mesosphere

36) atmospheric pressure decreases with elevation?

Why

a) balloon breaks as it rises in atmosphere

b) a student blows up a balloon in a airplane

3&) water heats up when placed in the sun? why

a) Water cycle

b) Absorption of geothermal energy

38) energy at the surface is from? A) wind b) sun

39) coriolis effect will impact a pressure system by? A) path of travel b) humidity

40) water sand experiment that has equal rates of heating will explain which error?

a) starts with different temperature

b) thermometers are less accurate