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1) Which of the following planets is known for being red?

- (A) Jupiter
- (B) Saturn
- (C) Mars
- (D) Mercury

2) Why is the Earth different from all other planets?

- (A) It has a breathable atmosphere.
- (B) It revolves around the Sun.
- (C) It has a rocky surface.
- (D) It has a moon.

3) Sabrina is making a model of the solar system. She chooses to use a tennis ball as the Earth. Relative to its size, which of the following would be the best model for the Sun?

- (A) baseball
- (B) basketball
- (C) golf ball
- (D) marble

4) In what way are the planets Mars, Mercury, and Earth similar?

- (A) They have the same period of revolution.
- (B) They are perfect spheres.
- (C) They exert the same gravitational force on each other.
- (D) They are all inner planets

5) Which planet has vast amounts of liquid water at its surface?

- (A) Venus
- (B) Mars
- (C) Jupiter
- (D) Earth

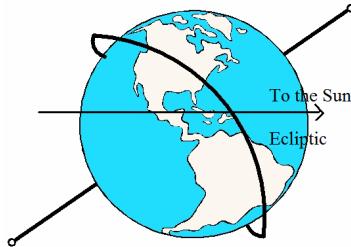
6) A belt of asteroids is located between which two planets?

- (A) Mars and Jupiter
  - (B) Mars and Earth
  - (C) Jupiter and Saturn
  - (D) Saturn and Uranus
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7) Three planets known as gas giants because of their large size and low density are

- (A) Venus, Neptune, and Jupiter
- (B) Jupiter, Saturn, and Venus
- (C) Jupiter, Saturn, and Uranus
- (D) Venus, Uranus, and Jupiter

8) Base your answer to the following question on



Which of the following occurs due to the rotation of the Earth?

- (A) the seasons
- (B) the daily temperatures
- (C) day and night
- (D) the passage of the Moon between the Earth and the Sun

9) Which of the following is caused by the rotation of the Earth on its axis?

- (A) days
- (B) weeks
- (C) seasons
- (D) years

10) The rotation of the earth causes

- (A) different seasons
- (B) day and night
- (C) the phases of the moon
- (D) precipitation

11) Earth's rotation (turning on its axis) causes

- (A) the seasons to change
- (B) the Moon to appear as different shapes
- (C) day and night
- (D) solar eclipses

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12) How much time does it take for Earth to make one complete revolution around the Sun?

- (A) 24 hours
- (B) 48 days
- (C) 365 days
- (D) 500 days

13) How long does Earth take to complete one orbit around the Sun?

- (A) 1 day
- (B) 1 month
- (C) 1 year
- (D) 1 decade

14) Which of the following takes approximately one year?

- (A) the Earth's revolution around the sun
- (B) the Earth's rotation
- (C) the moon's revolution around the Earth
- (D) the moon's revolution around the sun

15) Which statement provides the best evidence that Earth revolves around the Sun?

- (A) The Sun rises in the east and sets in the west.
- (B) A Foucault pendulum appears to shift its direction of swing.
- (C) The stars appear to follow circular paths around the North Star.
- (D) The seasons of spring, summer, fall, and winter follow a repeating pattern.

16) Which of the following causes the seasons to change on Earth?

- (A) the rotation of the earth
- (B) the revolution of the earth around the sun
- (C) the distance of the earth from the sun
- (D) the revolution of the sun around the earth

17) One complete cycle of the phases of the Moon takes approximately one

- (A) day
  - (B) week
  - (C) month
  - (D) year
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18) Which motion causes the Moon to show phases when viewed from the Earth?

- (A) the rotation of the Moon on its axis
- (B) the revolution of the Moon around the Earth
- (C) the rotation of the Sun on its axis
- (D) the revolution of the Sun around the Moon

19) The moon revolves around the Earth. This causes

- (A) the Earth to be warmer at night
- (B) the Earth to rotate more rapidly
- (C) the moon to shine more brightly than other objects in the sky
- (D) the moon to appear as different shapes during the month

20) Solid bedrock is changed to soil primarily by

- (A) erosion
- (B) weathering
- (C) the ocean
- (D) human activity

21) Why do animals, including humans, need soil in their environment?

- (A) soil is needed for animals to sleep on
- (B) soil provides air for animals to breathe
- (C) soil is needed for animals to walk on
- (D) soil provides support and nutrients for plants to grow

22) Base your answer to the following question on the table below.

**SOIL LAYERS**

LAYER	MATERIAL
A	Topsoil
B	Clay and sand
C	Clay, sand, and rocks
D	Bedrock

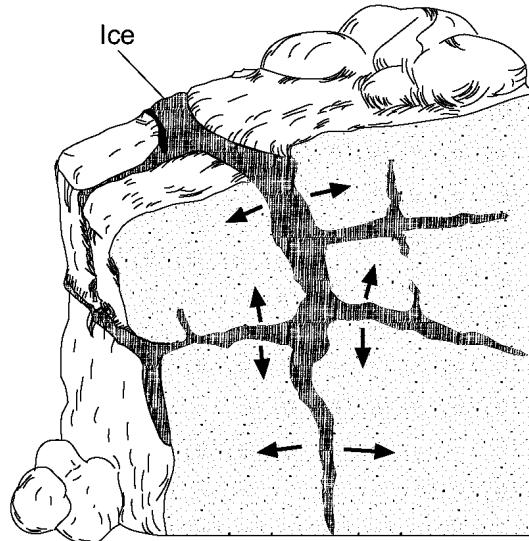
When exposed to the surface, which layer would have the fewest number of plants living in it?

- (A) Layer A
- (B) Layer B
- (C) Layer C
- (D) Layer D

23) Which of the following causes rocks to dissolve into smaller pieces?

- (A) ocean currents
- (B) earthquakes
- (C) acid rain
- (D) barometric pressure

24) The diagram below shows granite bedrock with cracks. Water has seeped into the cracks and frozen. The arrows represent the directions in which the cracks have widened due to weathering.



Which statement best describes the physical weathering shown by the diagram?

- (A) Enlargement of the cracks occurs because water expands when it freezes.
- (B) This type of weathering occurs only in bedrock composed of granite.
- (C) The cracks become wider because of chemical reactions between water and the rock.
- (D) This type of weathering is common in regions of primarily warm and humid climates.

25) By which processes are rocks broken up and moved to different locations?

- (A) evaporation and condensation
- (B) weathering and erosion
- (C) burial and cementation
- (D) compaction and transportation

26) Which process involves either a physical or chemical breakdown of earth materials?

- (A) deposition
- (B) sedimentation
- (C) weathering
- (D) cementing

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27) Which is the best example of physical weathering?

- (A) the cracking of rock caused by the freezing and thawing of water
- (B) the transportation of sediment in a stream
- (C) the reaction of limestone with acid rainwater
- (D) the formation of a sandbar along the side of a stream

28) Which of the following would be the result of weathering?

- (A) animals would go into hibernation
- (B) more of the animals would be washed away
- (C) large boulders would eventually turn into small rocks
- (D) the sun would dry up the plants

29) When the Appalachian Mountains were formed, they were a lot taller than they are today. What could be a reason for this?

- (A) Erosion such as wind or rain
- (B) The mountains shrunk.
- (C) Too many people have climbed them.
- (D) Many trees have been chopped down.

30) How do ocean waves cause erosion?

- (A) They move sand along the beach.
- (B) They carry soil down a mountain.
- (C) They cause rocks to break.
- (D) They form landslides.

31) How can streams change rocks and pebbles?

- (A) put sharp edges on the rocks and pebbles
- (B) make the rocks and pebbles smooth
- (C) combine them into bigger rocks
- (D) do nothing to the rocks and pebbles

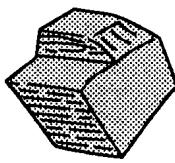
32) A truckload of sand was delivered to the school playground and piled up in a high mound. It rained for a week. The sand was no longer a mound. What best describes the process that happened to the sand?

- (A) it eroded
  - (B) it erupted
  - (C) it fossilized
  - (D) it evaporated
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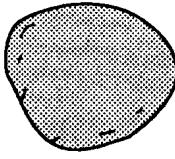
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33) Which rock particle was most likely transported by streams for the longest period of time?

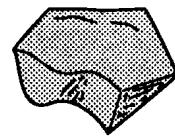
(A)



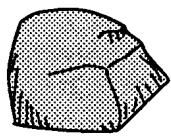
(B)



(C)



(D)



34) A change in the Earth's crust caused by wind blowing soil is called

- (A) weathering
- (B) wind erosion
- (C) an eruption
- (D) layering

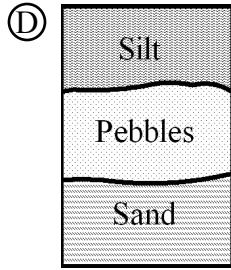
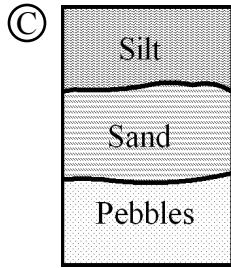
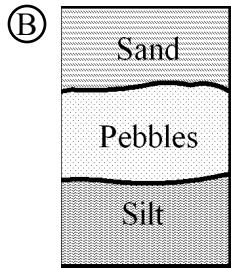
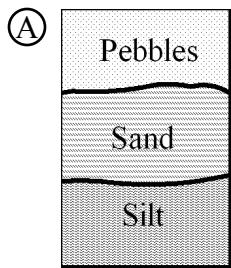
35) Which of the following is an example of erosion?

- (A) a river wears away the soil from its banks
- (B) warming temperatures break up the ice on a lake
- (C) sunlight causes old newspapers to turn yellow and crack
- (D) a copper penny turns black over time

36) Why are the rocks and pebbles found in riverbeds usually smooth?

- (A) The rocks and pebbles in riverbeds are not very old.
- (B) The rocks and pebbles rub against each other as water flows over them.
- (C) Rivers can only flow over smooth rocks and pebbles.
- (D) Organisms in the rivers break down the rocks and pebbles.

37) Jude collected soil samples from the area around his house. After examining the soil, he put it all into a single jar and added water. He shook the jar. Which picture shows how the silt, sand, and pebbles from his sample would settle?



38) Which feature of the Earth's surface is caused by wind?

- (A) rock quarries
- (B) canyons
- (C) sand dunes
- (D) mountains

39) Irrigation is the man-made application of water to soil. What does irrigation usually assist in?

- (A) the creation of electricity
- (B) the creation of avalanches
- (C) the increase in rainfall
- (D) the growing of crops

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40) Most of the Earth's water is

- (A) in the clouds
- (B) in the oceans
- (C) under the ground
- (D) in holding tanks for us to use

41) The diagram below shows the stages of a butterfly.

Egg → Caterpillar → ? → Adult

What is the missing stage?

- (A) tadpole
- (B) pupa
- (C) teenager
- (D) young

42) Humans have characteristics that are inherited, as well as others that are learned from their environment and those surrounding them. Which of the following traits is inherited?

- (A) walking
- (B) coloring
- (C) eye color
- (D) wearing clothing

43) The patterns on butterfly wings are

- (A) inherited from parent butterflies
- (B) inherited from birds
- (C) acquired from plant life
- (D) acquired from flying

44) Which of the following is an inherited human trait?

- (A) body weight
- (B) music interests
- (C) skin color
- (D) hair style

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45) What kingdom of living things is celery a member of?

- (A) Prokaryota
- (B) Animal
- (C) Protist
- (D) Plant

46) \_\_\_\_\_ is the process in which a new organism is produced by one parent?

- (A) asexual reproduction
- (B) sexual reproduction
- (C) pollination
- (D) germination

47) Which group is arranged in order of classification?

- (A) kingdom, genus, phylum, species, domain
- (B) phylum, kingdom, species, genus, domain
- (C) domain ,kingdom, phylum, genus, species
- (D) phylum, genus, species, kingdom, domain

48) Base your answer to the following question on



Which part of a spider is most useful in its classification?

- (A) wing development
- (B) number of legs
- (C) eye shape
- (D) body texture

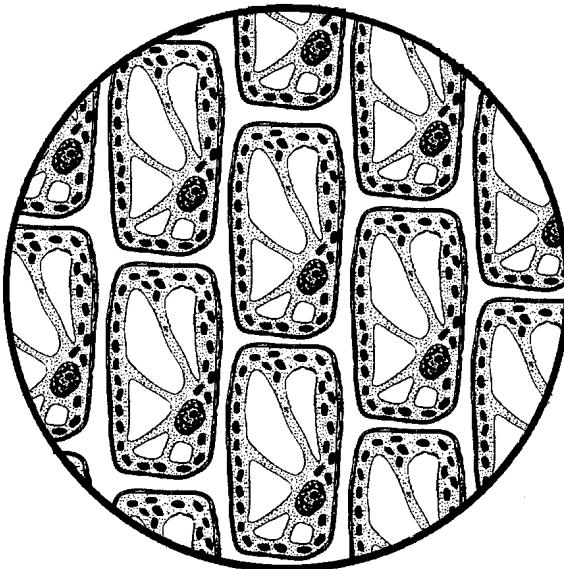
49) Which of the following characteristics is something that all birds have in common?

- (A) They have wings.
- (B) They can fly.
- (C) They eat insects.
- (D) They have talons.

50) Humans belong to which kingdom?

- (A) Plants
- (B) Animals
- (C) Fungi
- (D) Protists

51) Base your answer to the following question on Charlie is taking care of a living organism. It needs water, oxygen, carbon dioxide, and nutrients to survive. The organism cannot move but it bends towards the light. Under the microscope, part of the organism looks like this:



Which kingdom does Charlie's organism belong to?

- (A) Plants
- (B) Animals
- (C) Fungi
- (D) Protists

52) Base your answer to the following question on the table below.

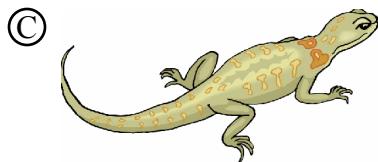
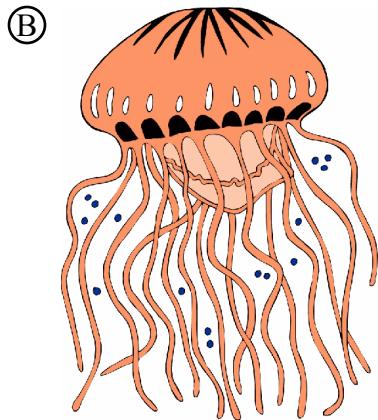
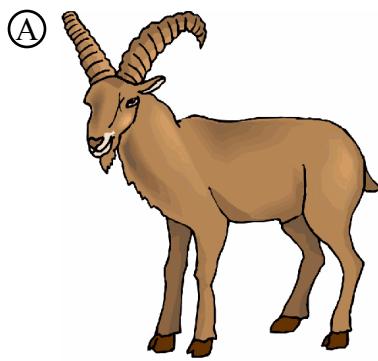
**ANIMAL CLASSIFICATIONS**

Classification	Examples
Kingdom – Animal	Dolphin, house cat, songbird, lynx, wolf, earthworm, butterfly, hydra
Phylum – Chordata	Dolphin, house cat, songbird, lynx, wolf
Genus – <i>Felis</i>	house cat, lynx
Species – <i>domestica</i>	house cat

Which of the following animals are not in the phylum Chordata?

- (A) dolphin
- (B) house cat
- (C) wolf
- (D) earthworm

53) Which of the following animals below is an invertebrate?



54) The human backbone is also known as the –

- (A) ribs
- (B) funny bone
- (C) skull
- (D) spine

55) A vertebrate differs from an invertebrate in that it

- (A) can swim
- (B) lays eggs
- (C) has a backbone
- (D) needs water to survive

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56) A vascular plant has

- (A) flowers
  - (B) tubes
  - (C) poisons
  - (D) brains
-