When Earth is seen from outer space, it looks mainly blue. This is because most of Earth is covered with —

A ice
B mountains
C oceans
D deserts
1 Mold is often found growing on old bread. In a food chain, mold is a —

A decomposer
B producer
C consumer
D scavenger

2 Skunks spray a strong-smelling liquid to —

F get rid of wastes
G attract prey
H defend themselves
J help nearby plants grow
Which of these BEST describes the texture of the metal spoon?

A  Small
B  Smooth
C  Flexible
D  Shiny
A container was filled with ice cubes. The container was left outside until the ice cubes melted. Based on the picture, how much water came from the melted ice cubes?

F 3 milliliters
G 5 milliliters
H 7 milliliters
J 10 milliliters
5  When notebook paper is folded to make an airplane, what physical property of the paper changes?

A  Mass  
B  Weight  
C  Shape  
D  Smell  

6  Why is it important to protect soil?

F  It covers the bedrock layer in the earth.  
G  It has nutrients used by plants to grow.  
H  It holds many harmful pollutants.  
J  It dries quickly in sunlight.  

7  Jake’s cats eat food from a can. The cats come running into the kitchen when they hear the electric can opener. Now, each time Jake’s mother opens a can of corn, the cats come running. This is an example of —

A  learned behavior  
B  correct behavior  
C  instinct  
D  migration  

Which of these simple machines does this model represent?

F  A screw
G  A wedge
H  A lever
J  A pulley
9  A student is blindfolded and given several objects to feel. Which of these would he describe as hard and smooth?

A  Screw

B  Balloon

C  Teddy bear

D  Marble

10  Which of these will take the LONGEST time to observe?

F  One moon-phase cycle
G  One ocean-tide cycle
H  An acorn growing into an adult tree
J  A caterpillar becoming a butterfly
11  Which of these is the BEST way to save animals and trees?
   A  Ride bikes more
   B  Make more farmland
   C  Take care of forests
   D  Move to the city

12  Students planted two types of bean seeds. Both types of bean
    plants are measured after two weeks. Which of these questions
    are they MOST likely trying to answer?
   F  Which type of bean plant grows faster?
   G  Which type of bean plant is prettier?
   H  Which type of bean plant tastes better?
   J  Which type of bean plant costs more?
13 The teeth of a carnivore are MOSTLY —
   A pointed
   B rounded
   C wide
   D flat

14 Which of these glasses will MOST likely become empty first because of evaporation?
Students made observations about these toy cars. Which of these BEST describes Car 1 and Car 2?

A  Car 1 is heavier than Car 2.
B  Car 2 is darker than Car 1.
C  Car 2 is bigger than Car 1.
D  Car 1 is longer than Car 2.
What does a weather vane show?

- F  Wind direction
- G  Air temperature
- H  Cloud cover
- J  Air pressure

17  Which part of a bicycle BEST moves in a circle?

- A  Seat
- B  Frame
- C  Foot pedal
- D  Kickstand
18 When it rains, some animals will —

F hibernate for the season
G migrate to warmer climates
H change their body covering
J move to seek shelter

19

About how long is the dragonfly in the picture?

A 2 centimeters
B 4 centimeters
C 6 centimeters
D 8 centimeters
20 Having dry, hot weather for a long time can cause a —

F  drought
G  thunderstorm
H  tornado
J  flood

21 Which of these describes water in a solid state?

A  Vapor rising in the sky
B  Hail during a storm
C  Waves crashing on the seashore
D  Rain falling from the clouds
22  Which lists the correct order of changes that happen to a plant in spring?

F  Buds form, flowers open, fruits grow
G  Flowers die, fruits grow, buds form
H  Seeds drop, flowers open, buds form
J  Seeds drop, flowers die, fruits grow

23  Which of these is the BEST title for the group of objects shown?

A  Heavy Objects
B  Rough Objects
C  Wooden Objects
D  Magnetic Objects
24 Which of these is made from a plant?

F  Cotton Shirt

G  Leather Boots

H  Plastic Glasses

J  Metal Bracelet
Students used thermometers to compare temperatures around their school. Which of these is MOST likely the reason it was cooler under a tree than on the playground?

A  The tree blocked the cold wind.
B  A student blocked the wind.
C  Tree leaves blocked some of the sunlight.
D  A cloud blocked the Sun.
All of the objects shown can be described as —

F  having moving parts  
G  having the same size  
H  needing a magnifying glass to be seen  
J  being made from more than one material
27 Which of these trees stays green all year?

A Pine Tree
B Sweet Gum Tree
C Dogwood Tree
D Maple Tree

28 Which of these can make a shadow on the ground during the day?

F River
G Air
H Thunder
J Cloud
29  People can help keep a forest a good place for birds to live by —

A  dumping garbage in a small part of the forest
B  building a road through the middle of the forest
C  burning dead trees to make smoke in the air
D  preventing too many trees from being cut down

30

Which of these can be dissolved in water?

F  Grains of sand
G  Baking soda
H  Wood chips
J  Cooking oil
This pencil is about how many paper clips long?

A  2
B  5
C  7
D  9
Which of these BEST describes this leaf?

F  Long
G  Square-shaped
H  Round
J  Star-shaped
Which of these birds MOST likely uses its beak to scoop up small fish for food?

A

B

C

D
34 Which of these is a compound machine that is a lever and a wedge working together?

F [Image of a skateboard]
H [Image of a pencil sharpener]
G [Image of a pair of scissors]
J [Image of a bicycle]
Based on the picture of this dog, an observation can be made that this animal —

A  runs fast
B  barks loudly
C  jumps high
D  has spots
Which of these may have caused the boulders to break away from the cliff?

F  Weathering  
G  Evaporating  
H  Depositing  
J  Grinding
What is the mass of the frog?

A  39 grams (g)
B  40 grams (g)
C  41 grams (g)
D  42 grams (g)

38 A company plants trees on a bare hillside. Which of these is the BEST reason for planting the trees?

F  The trees provide oxygen for the soil.
G  The trees prevent soil from washing away.
H  The trees make shade for animals living there.
J  The trees cause animals to move to other places.
39  A simple machine makes work easier because using it —
   A  takes less force to move something heavy
   B  changes the weight of something heavy
   C  improves the way something looks
   D  lets something become a different shape

40

This picture BEST shows how —
   F  animals use plants for food
   G  animals use plants for homes
   H  plants get in the way of animals
   J  plants keep animals warm in winter
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Grade 3 Science, Core 1

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A total raw score (left column) is converted to a total scaled score (right column). The total scaled score may range from 0 to 600. A scaled score of 400 or more means the student passed the SOL test, while a scaled score of 399 or less means the student did not pass the test. A scaled score of 500 or more indicates the student passed the SOL test at an advanced level.