VIRGINIA STANDARDS OF LEARNING ASSESSMENTS

Spring 2003 Released Test

GRADE 3 SCIENCE

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Science

DIRECTIONS

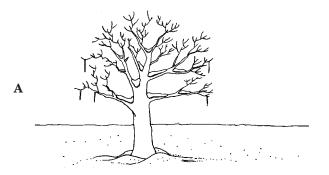
Read each question carefully and choose the best answer.

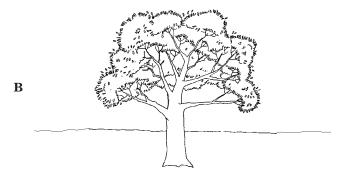
SAMPLE

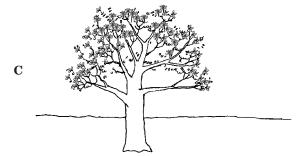
When the Earth is seen from outer space, it looks mainly blue. This is because most of the Earth is covered with —

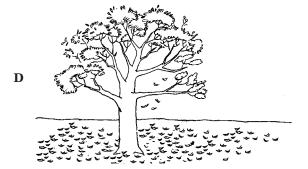
- A ice
- **B** mountains
- c oceans
- **D** deserts

1 The pictures below show the same tree at different times of the year. Which picture was taken during the winter?

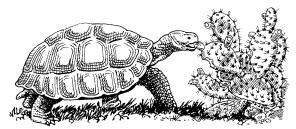








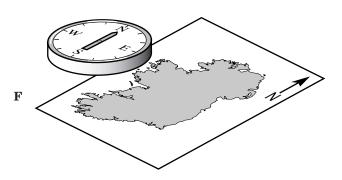
- 2 Which of these is used mainly for the sense of touch?
 - F Eyes
 - G Ears
 - н Nose
 - J Skin

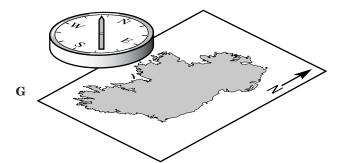


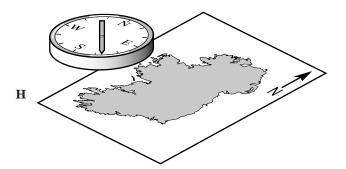
What protects this animal from predators?

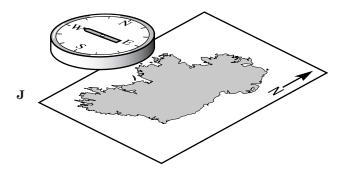
- A Large shell
- B Large mouth
- c Thick legs
- D Long neck

4 Which picture shows the map correctly pointing to the North Pole?

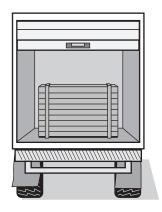








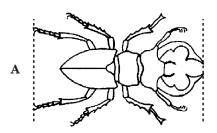
- 5 Which of these probably causes the most air pollution?
 - A Trees
 - **B** Cars
 - c Wind
 - **D** Rain

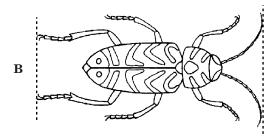


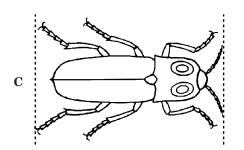
Which one of these would be <u>best</u> to use to move the box out of the truck?

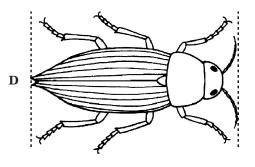
- F A pulley
- G A lever
- н A wheel and axle
- J An inclined plane

7 Which of these beetles is 5 centimeters long?

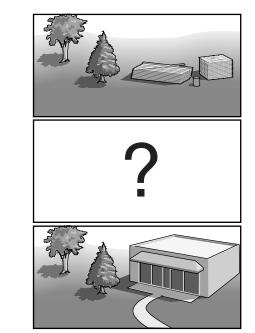




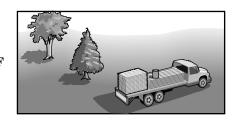




Note that due to varying printer properties, measurement items may not appear in exact proportions.

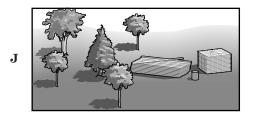


Which of these is probably the missing picture?





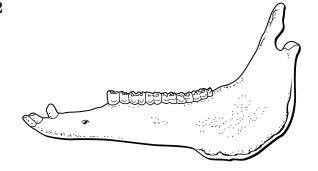




- 9 Some children are making mud balls. They cut the mud balls in half. Which of these changed when the mud balls were cut in half?
 - A The softness of the mud ball
 - B The size of the mud ball
 - c The color of the mud ball
 - D The stickiness of the mud ball
- $10 \quad Beetle \rightarrow Cat \rightarrow Goat \rightarrow Horse$

These animals are in order from —

- F oldest to youngest
- G smallest to largest
- н heaviest to lightest
- J roughest to smoothest
- 11 One reason people build tall buildings in cities is that there is too little
 - A land
 - **B** air
 - c minerals
 - **D** water



Bethany saw this jawbone while walking in the woods. She could tell by the teeth that this animal was —

- F a herbivore
- G a producer
- н a decomposer
- J a carnivore
- 13 A student saw a bird leave a nest. What does the student need to do to find out if the bird really lives in the nest?
 - A Put out lots of bird food
 - B Build a bird bath
 - c Watch the bird many times
 - D Measure the size of the bird
- 14 What part of an apple tree becomes the fruit?
 - F The roots
 - G The stems
 - н The leaves
 - J The flower

- 15 Plucking the string on a guitar creates what kind of motion in the string?
 - A Circular
 - **B** Rolling
 - c Vibrating
 - **D** Sliding

16 w

Υ



X

Ζ

Some students were watching the movement of a shadow. In the diagram above, where is the sun?

- \mathbf{F} W
- $\mathbf{G} \mathbf{X}$
- н Ү
- \mathbf{J} \mathbf{Z}

17 Humus, silt, clay, and sand are all parts of —

- A soil
- B fungi
- c rocks
- **D** plants

18 Which of these is attracted to a magnet?

- F An iron nail
- G A copper penny
- н A silver spoon
- J An aluminum pan

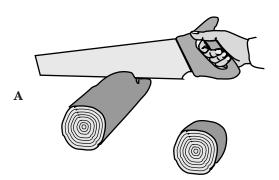
19 Which of these carries away the most soil?

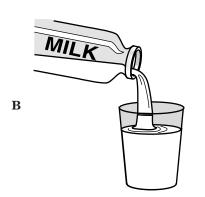
- A Fires
- **B** Floods
- c Earthquakes
- **D** Volcanoes

20 Which of these is a decomposer?

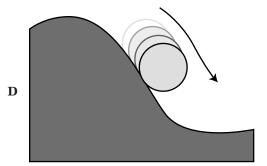
- F Mouse
- **G** Mushroom
- н Tree
- J Fox

21 Which of these <u>best</u> shows a change in a state of matter?







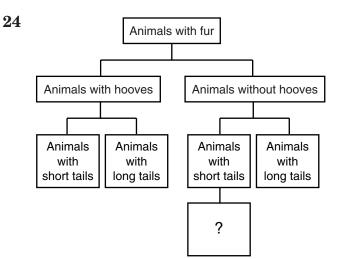


22 Which of these is <u>most</u> likely to cause floods?

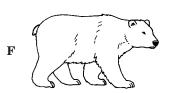
- F Evaporation
- G Low temperatures
- н High winds
- J Heavy rain

23 Which of these $\underline{\text{best}}$ shows circular motion?

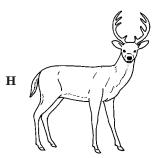
- $\boldsymbol{A} \ A \ dog \ jumping \ up \ and \ down$
- B A dog walking to its house
- c A dog chasing its tail
- D A dog running after a ball

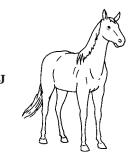


Which of the following would fit in the empty box?

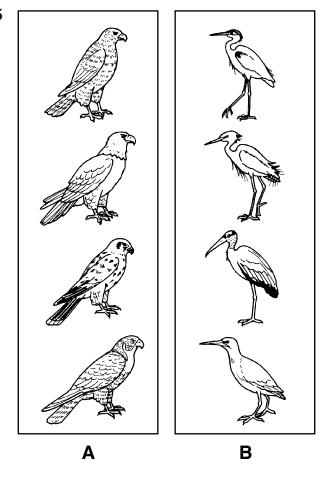








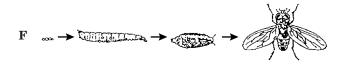




The animals in box B are <u>different</u> from the animals in box A because the animals in box B have —

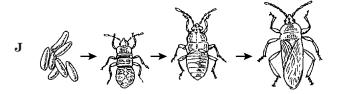
- A short legs
- B feet for catching food
- c feathers
- D long beaks

26 Which of these shows an animal that looks similar to its parent during its life after hatching?









27 Which of these does <u>not</u> live in the same place as the others?



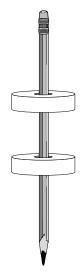






- 28 People learn many things, but they do some things by instinct. Which of these is instinctive behavior?
 - F Swallowing food
 - G Turning off a television set
 - н Talking with friends
 - J Reading a book

29

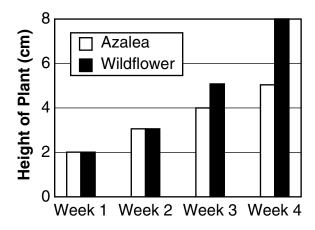


The picture shows some ring magnets on a pencil. A student pushed the magnets together, but they came apart as soon as the student let go. The magnets stay apart from each other because the —

- A magnets are too weak to stay together
- B materials that make up the magnets are not magnetic
- C same poles of the magnets are facing each other
- **D** pencil stops the force of the magnets

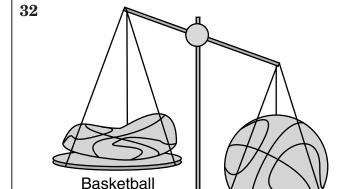
30 The following chart shows the growth of two flowers for four weeks.





Which week did the wildflower grow the most?

- F Week 1
- G Week 2
- н Week 3
- J Week 4
- 31 The spotted turtle is common in fresh water. It eats insects, tadpoles, dead fish, and tender aquatic plants. Which of these best describes the spotted turtle?
 - A A herbivore
 - **B** A carnivore
 - c An omnivore
 - **D** A decomposer



The picture above best shows that air has —

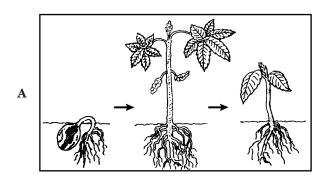
Basketball with air

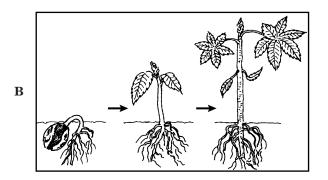
- F mass
- G energy

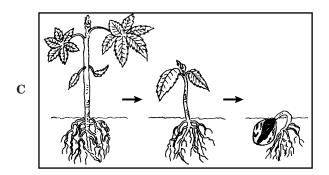
without air

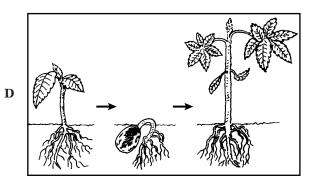
- **H** oxygen
- J moisture

33 Which of these pictures shows the way a seed would grow?



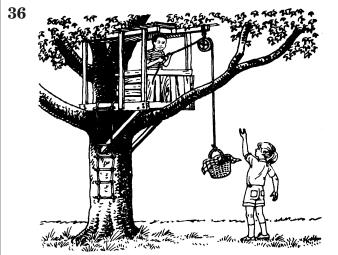






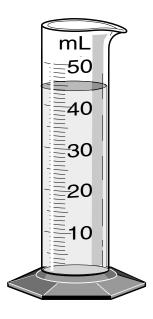
34 Which of these will probably cause the most changes in a pond habitat?

- F A frog swimming in the pond
- G A human fishing in the pond
- н Rocks at the bottom of the pond
- J Many years with little rain in the pond
- 35 A student was outside playing. He could tell that there was an apple pie in the oven. Which sense did the student use to let him know a pie was baking?
 - A Sense of taste
 - B Sense of hearing
 - c Sense of smell
 - **D** Sense of touch



The basket is being lifted by —

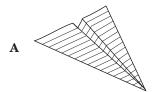
- F a pulley
- G a wheel and axle
- H an inclined plane
- J a lever

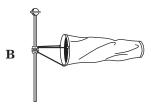


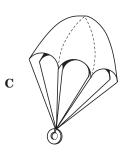
What is the volume of salt water in this cylinder?

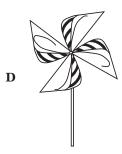
- **A** 40 mL
- в 41 mL
- c 44 mL
- **D** 50 mL
- 38 A class was studying the weather that occurs in their community. Which of these is something they should record in their weather charts?
 - F The size of the sun
 - G The phases of the moon
 - H The amount of rainfall
 - J The speed of evaporation

39 Which of these models might help show how a windmill works?









- 40 Which of these will cause an animal to hibernate?
 - F Heavy rains
 - G Cloudy skies
 - н Cold weather
 - J Longer days

Answer Key

Test Sequence	Correct Answer	Reporting Category	Reporting Category Description
1	A	018	Earth/Space Systems and Cycles
2	J	015	Scientific Investigation
3	A	017	Life Processes and Living Systems
4	F	016	Force, Motion, Energy, and Matter
5	В	018	Earth/Space Systems and Cycles
6	J	016	Force, Motion, Energy, and Matter
7	С	015	Scientific Investigation
8	Н	018	Earth/Space Systems and Cycles
9	В	016	Force, Motion, Energy, and Matter
10	G	015	Scientific Investigation
11	A	018	Earth/Space Systems and Cycles
12	F	017	Life Processes and Living Systems
13	С	015	Scientific Investigation
14	J	017	Life Processes and Living Systems
15	С	016	Force, Motion, Energy, and Matter
16	F	018	Earth/Space Systems and Cycles
17	A	018	Earth/Space Systems and Cycles
18	F	016	Force, Motion, Energy, and Matter
19	В	018	Earth/Space Systems and Cycles
20	G	017	Life Processes and Living Systems
21	С	016	Force, Motion, Energy, and Matter
22	J	018	Earth/Space Systems and Cycles
23	C	016	Force, Motion, Energy, and Matter
24	F	015	Scientific Investigation
25	D	015	Scientific Investigation
26	J	017	Life Processes and Living Systems
27	C	017	Life Processes and Living Systems
28	F	017	Life Processes and Living Systems
29	C	016	Force, Motion, Energy, and Matter
30	J	015	Scientific Investigation
31	C	017	Life Processes and Living Systems
32	F	016	Force, Motion, Energy, and Matter
33	В	017	Life Processes and Living Systems
34	J	017	Life Processes and Living Systems
35	C	015	Scientific Investigation
36	F	016	Force, Motion, Energy, and Matter
37	С	015	Scientific Investigation
38	Н	018	Earth/Space Systems and Cycles
39	D	015	Scientific Investigation
40	Н	018	Earth/Space Systems and Cycles