

VIRGINIA STANDARDS OF LEARNING

Spring 2009 Released Test

GRADE 3 SCIENCE

Form S0119, CORE 1

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Directions

Read each question and choose the best answer.

SAMPLE

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



What units would you use to measure the length of this pencil?

- A** Grams
- B** Kilometers
- C** Centimeters
- D** Liters

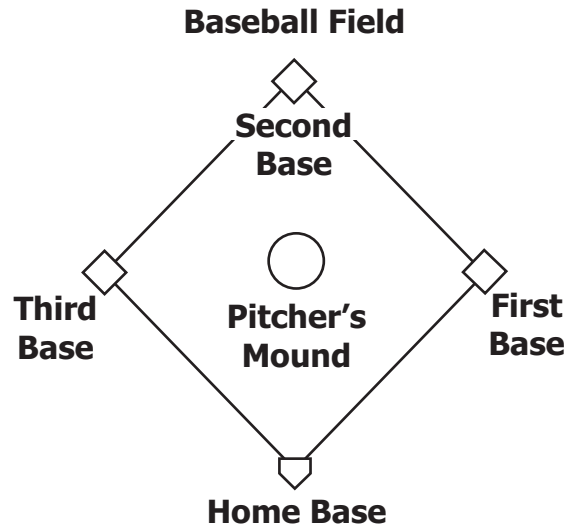
2 Which of these is MOST likely the hardest to bend?

- F** Rubber band
- G** Cloth ribbon
- H** Leather shoe
- J** Wooden board

3 Which of these lists has only products that come from plants?

- A** Paper, spices, and fibers
- B** Wool, lumber, and butter
- C** Medicines, leather, and milk
- D** Cotton, rubber, and eggs

4



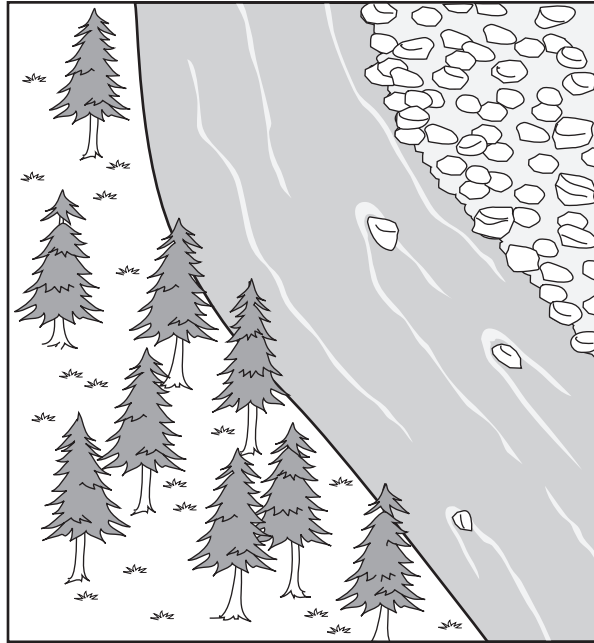
Which shape is MOST like the one made by connecting the bases on the baseball field?

- F** Circle
- G** Square
- H** Triangle
- J** Oval

5 Tony is studying ladybugs in a garden. Which of these would BEST help Tony to count the spots on a ladybug?

- A** Stopwatch
- B** Thermometer
- C** Measuring cup
- D** Magnifying glass

6



What causes fewer plants to grow on the rocky side of the river?

- F** There is not enough sunlight.
- G** There is not enough soil.
- H** There is not enough water.
- J** There is not enough air.

7 Which would help conserve water?

- A** Turn off water while brushing teeth
- B** Wash the car every day
- C** Water the lawn every day
- D** Run the dishwasher after each meal

8 Which of these is needed in all stages of the butterfly's life cycle?

- F** Wings
- G** Eyes
- H** Soil
- J** Air

9 How are a tree and grass alike?

- A** Both make wood.
- B** Both have roots.
- C** Both need moonlight.
- D** Both have short lives.

10 Which of these most likely has the GREATEST mass?

- F** Chicken
- G** Puppy
- H** Lizard
- J** Horse

11

Plant Observations

Thin Stem
Green Leaves
Red Blossoms

What type of plant is MOST likely described?

- A** A flowering plant
- B** A pine tree
- C** Grass
- D** Cactus

12 The BEST way to make a shadow on a living room wall is to —

- F** hold a lamp near the floor
- G** turn off the lights in the room
- H** sit close to the wall near a window
- J** stand between a light and the wall

13 Which of these is a nonliving part of a forest?

- A** Tree
- B** Soil
- C** Worm
- D** Mushroom

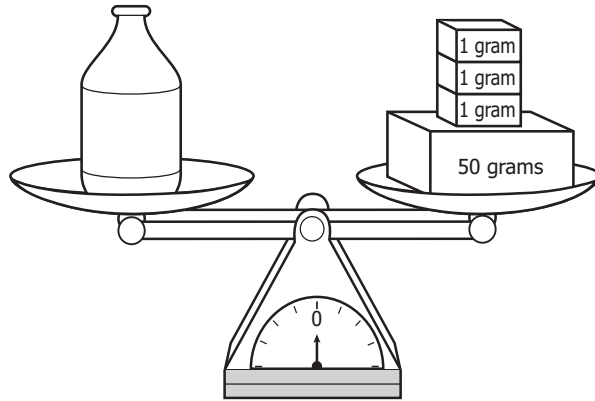
14



A sand dune is shown. Which of these causes sand dunes to form?

- F** Winds blowing
- G** Plants growing
- H** Animals digging
- J** Temperatures rising

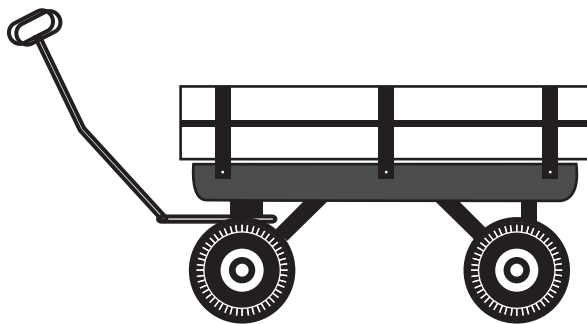
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What is the mass of the bottle shown in the picture?

- A** 47 grams
- B** 53 grams
- C** 103 grams
- D** 150 grams

16



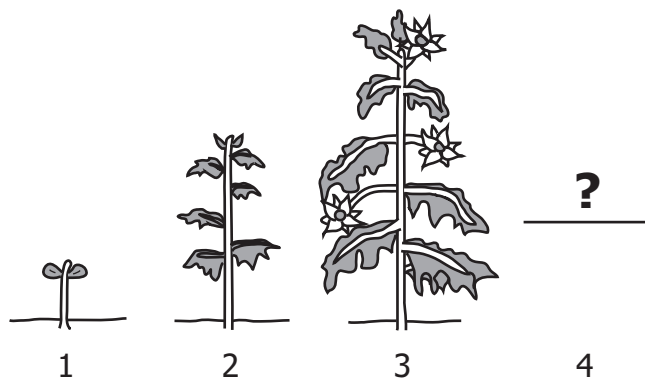
Which kind of work is made easier by the wheels of a wagon?

- F** Pulling a heavy load
- G** Lifting a wide load
- H** Dividing a large load
- J** Holding a small load

17 Both hurricanes and tornadoes always —

- A** cause flooding
- B** are hundreds of miles wide
- C** have high winds
- D** produce light snow

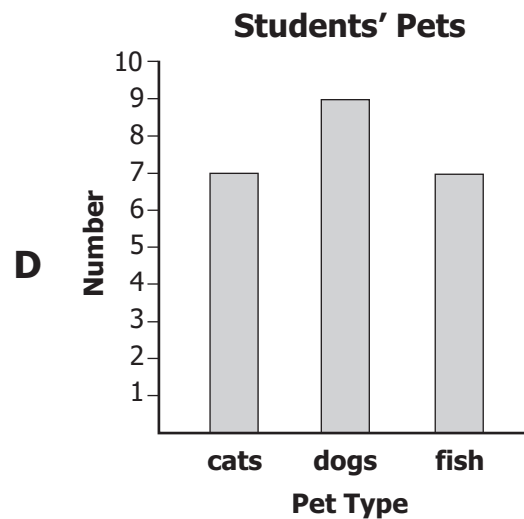
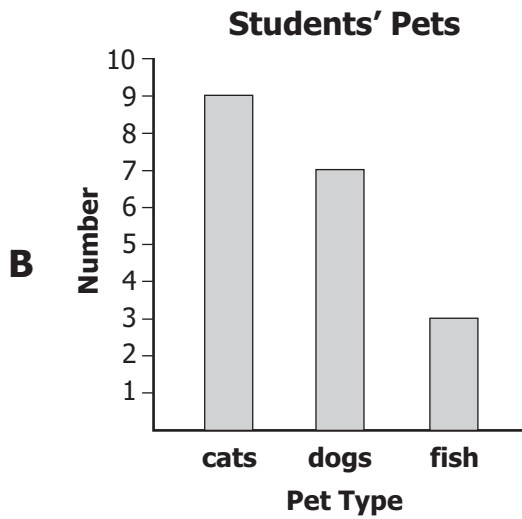
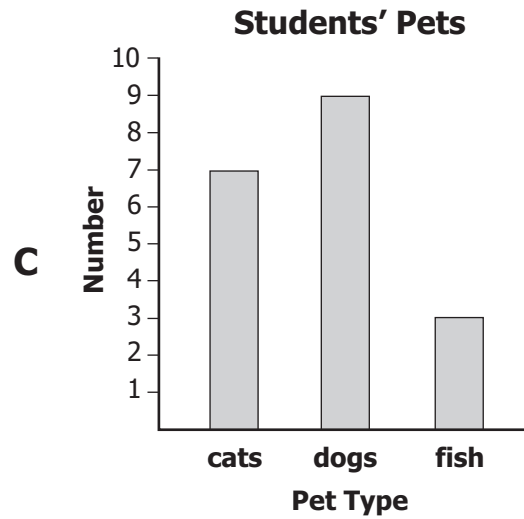
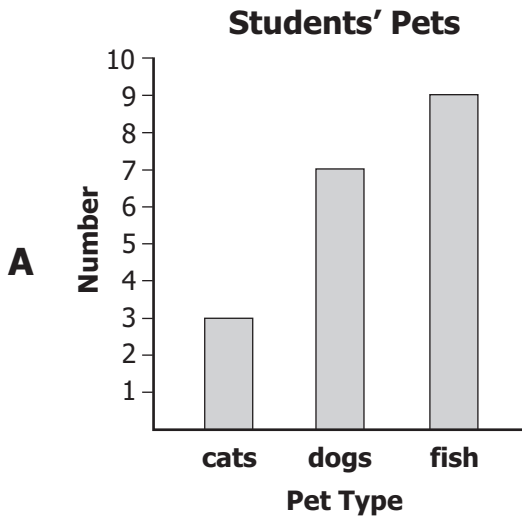
18



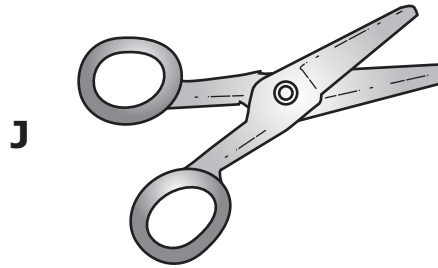
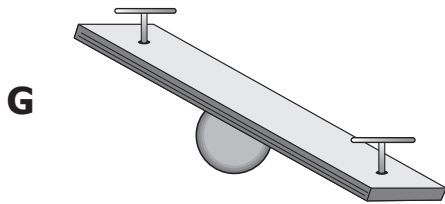
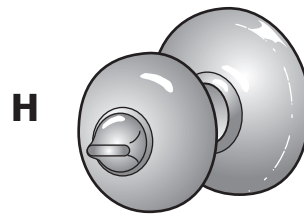
In picture 4, what will take the place of the flowers in picture 3?

- F** Buds
- G** Fruit
- H** Leaves
- J** Roots

19 Students in a class count their pets. All together, they have seven cats, nine dogs, and three fish. Which graph shows the correct number of pets?



20 Which machine uses a wheel and axle?



21 From what source does almost all heat energy on Earth come?

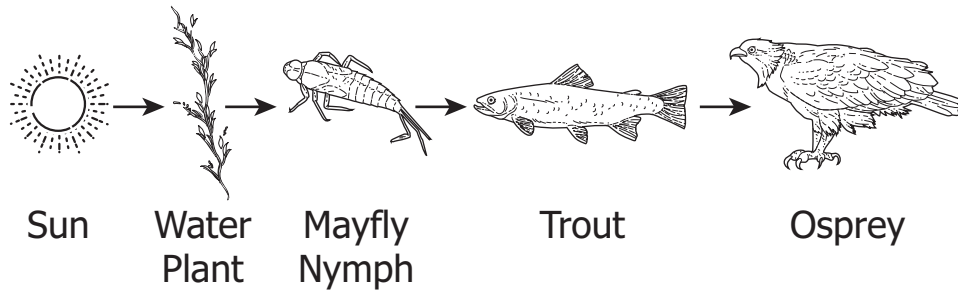
- A** Wind
- B** Water
- C** The Sun
- D** The Moon

22 Which of these tells something about how an apple looks?

- F** It is soft.
- G** It is blue.
- H** It is square.
- J** It is smooth.

23 A metal rod is struck and starts to vibrate. Which of these could happen next?

- A** The metal rod becomes a liquid.
- B** The metal rod becomes heavier.
- C** The metal rod attracts other metals.
- D** The metal rod produces sound.

Food Chain Around a Stream

Based on the food chain, which of these is a carnivore?

- F** Sun
- G** Water plant
- H** Mayfly nymph
- J** Osprey

25 Which job is done in Virginia only during the fall season?

- A** Picking apples
- B** Feeding animals
- C** Selling clothes
- D** Building houses

26 Which of these senses lets Dora know when a skunk has been close to her house?

- F** Taste
- G** Touch
- H** Smell
- J** Hearing

27 A puddle of water on a concrete driveway will disappear after a few hours during a sunny day. Where does the water go as it disappears?

- A** It goes into the air.
- B** Animals drink it.
- C** It soaks into the concrete.
- D** It becomes a different substance.

28 Camouflage MOST helps an animal with which of these life needs?

- F** Finding shelter
- G** Hiding from predators
- H** Gathering enough food
- J** Raising young

29 Which of these activities makes the MOST air pollution?

- A** Storing trash bags
- B** Reusing trash bags
- C** Burning trash bags
- D** Recycling trash bags

30 Which of these BEST describes the way a feather feels?

- F** Colorful
- G** Soft
- H** Low
- J** Bright



The picture shows a jar with its lid. What kind of simple machine is a jar lid?

- A** Ramp
- B** Pulley
- C** Screw
- D** Wedge

32 Which of these is the BEST sign that the fall season has begun?

- F** Plants forming new buds
- G** Sun shining on flowers
- H** Grass being wet in the morning
- J** Leaves changing color on trees

33 A paper bag is ripped into pieces. Which of these **BEST** describes the pieces of the bag?

- A** Stronger than the whole bag
- B** Thicker than the whole bag
- C** Smaller than the whole bag
- D** Darker than the whole bag

34

Measurements of Kicked Ball

Student	Distance Measured (meters)
1	49
2	65
3	48
4	50

Four students measured the distance a ball was kicked. The distances are shown in the table. Which student measured a distance that was much greater than the other measurements?

- F** Student 1
- G** Student 2
- H** Student 3
- J** Student 4

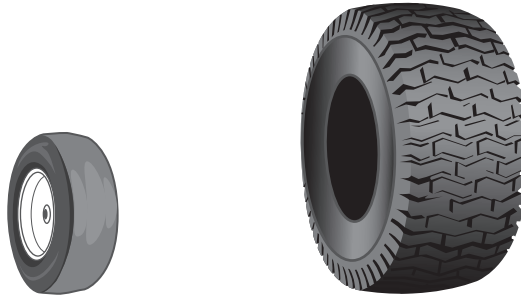
35 An old T-shirt can be ripped into smaller pieces and used as rags. An empty milk jug can be used to water houseplants. Both of these are examples of how —

- A** saving water conserves future resources
- B** using old materials can waste money
- C** plants need water to be healthy
- D** everyday materials can be reused

36 Which causes the GREATEST change in a grassy field over time?

- F** The time of day
- G** Amount of yearly rainfall
- H** Number of birds nesting
- J** Seasonal migration of animals

Tires

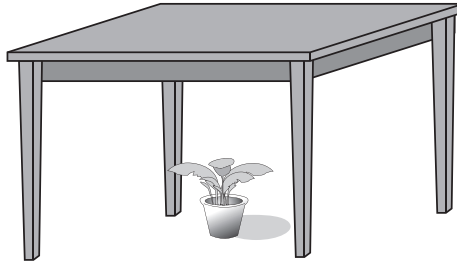


Lawn Mower Tire

Tractor Tire

Compared to the lawn mower tire, the tractor tire is —

- A smaller
- B thinner
- C lighter
- D rougher

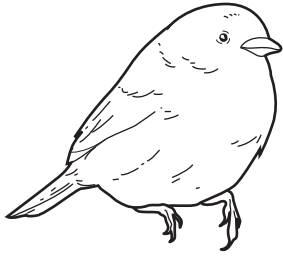


A plant is put in a pot of soil and placed under a table. The plant is given water every week, but it stops growing. The plant MOST likely needs —

- F** more light
- G** thicker soil
- H** cleaner air
- J** more space

39 Which of these animals is BEST able to live in water?

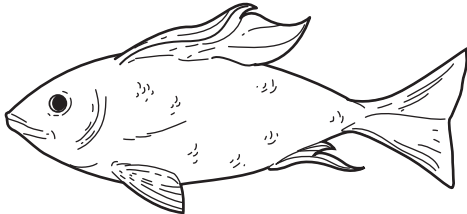
A



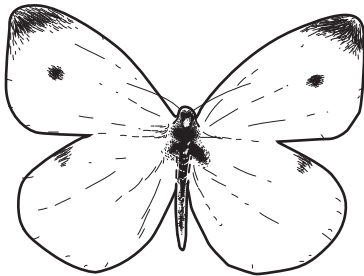
B

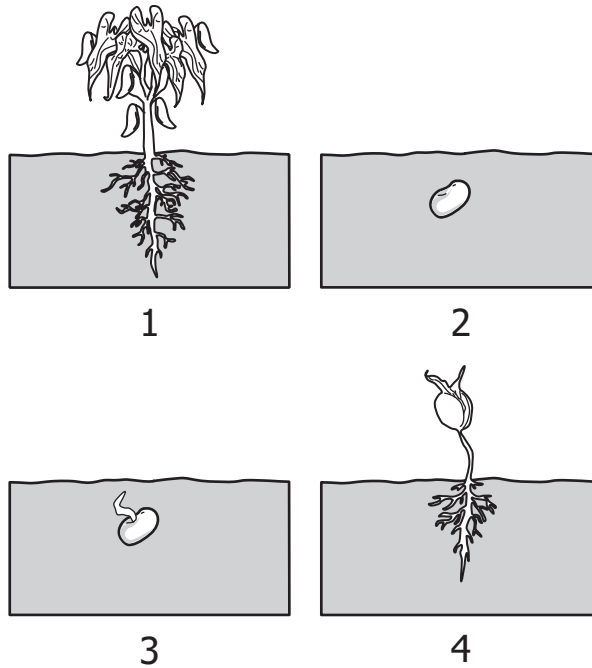


C



D





Which of the following **BEST** shows the order of events in the life cycle of a bean plant?

- F** 2, 3, 4, 1
- G** 3, 4, 2, 1
- H** 1, 2, 4, 3
- J** 1, 4, 3, 2

Answer Key-3005-S0119

Test Sequence Number	Correct Answer	Reporting Category	Reporting Category Description
1	C	001	Scientific Investigation, Reasoning, and Logic
2	J	002	Force, Motion, Energy, and Matter
3	A	003	Life Processes and Living Systems
4	G	002	Force, Motion, Energy, and Matter
5	D	001	Scientific Investigation, Reasoning, and Logic
6	G	003	Life Processes and Living Systems
7	A	004	Earth / Space Systems and Cycles
8	J	003	Life Processes and Living Systems
9	B	001	Scientific Investigation, Reasoning, and Logic
10	J	002	Force, Motion, Energy, and Matter
11	A	001	Scientific Investigation, Reasoning, and Logic
12	J	004	Earth / Space Systems and Cycles
13	B	003	Life Processes and Living Systems
14	F	004	Earth / Space Systems and Cycles
15	B	001	Scientific Investigation, Reasoning, and Logic
16	F	002	Force, Motion, Energy, and Matter
17	C	004	Earth / Space Systems and Cycles
18	G	003	Life Processes and Living Systems
19	C	001	Scientific Investigation, Reasoning, and Logic
20	H	002	Force, Motion, Energy, and Matter
21	C	004	Earth / Space Systems and Cycles
22	J	001	Scientific Investigation, Reasoning, and Logic
23	D	002	Force, Motion, Energy, and Matter
24	J	003	Life Processes and Living Systems
25	A	004	Earth / Space Systems and Cycles
26	H	001	Scientific Investigation, Reasoning, and Logic
27	A	002	Force, Motion, Energy, and Matter
28	G	003	Life Processes and Living Systems
29	C	004	Earth / Space Systems and Cycles
30	G	001	Scientific Investigation, Reasoning, and Logic
31	C	002	Force, Motion, Energy, and Matter
32	J	004	Earth / Space Systems and Cycles
33	C	002	Force, Motion, Energy, and Matter
34	G	001	Scientific Investigation, Reasoning, and Logic
35	D	004	Earth / Space Systems and Cycles
36	G	003	Life Processes and Living Systems
37	D	002	Force, Motion, Energy, and Matter
38	F	003	Life Processes and Living Systems
39	C	003	Life Processes and Living Systems
40	F	004	Earth / Space Systems and Cycles

Grade 3 Science, Core 1

If you get this many items correct:	Then your converted scale score is:
0	000
1	80
2	125
3	153
4	174
5	191
6	206
7	218
8	230
9	241
10	250
11	260
12	269
13	277
14	285
15	293
16	301
17	309
18	316
19	323
20	331
21	338
22	345
23	353
24	360
25	368
26	376
27	384
28	392
29	401
30	410
31	419
32	429
33	440
34	453
35	467
36	483
37	503
38	531
39	575
40	600

