

VIRGINIA STANDARDS OF LEARNING

Spring 2009 Released Test

# GRADE 3 SCIENCE

---

Form S0119, CORE 1

**Property of the Virginia Department of Education**

©2009 by the Commonwealth of Virginia, Department of Education, P.O. Box 2120, Richmond, Virginia 23218-2120. All rights reserved. Except as permitted by law, this material may not be reproduced or used in any form or by any means, electronic or mechanical, including photocopying or recording, or by any information storage or retrieval system, without written permission from the copyright owner. Commonwealth of Virginia public school educators may reproduce any portion of these released tests for non-commercial educational purposes without requesting permission. All others should direct their written requests to the Virginia Department of Education, Division of Student Assessment and School Improvement, at the above address or by e-mail to [Student\\_Assessment@doe.virginia.gov](mailto:Student_Assessment@doe.virginia.gov).

## 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?**

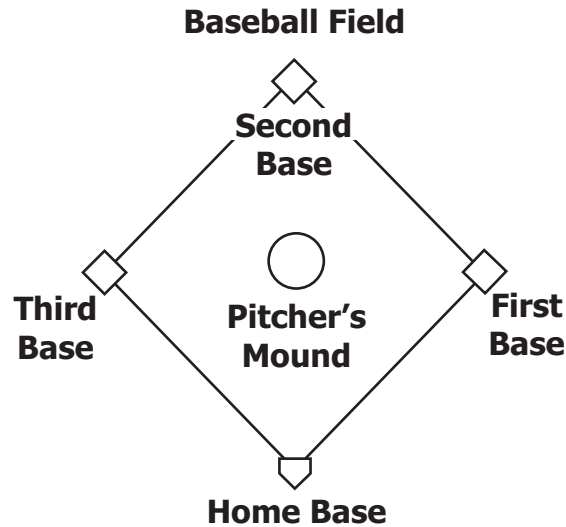
- A** Grams
- B** Kilometers
- C** Centimeters
- D** Liters

**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

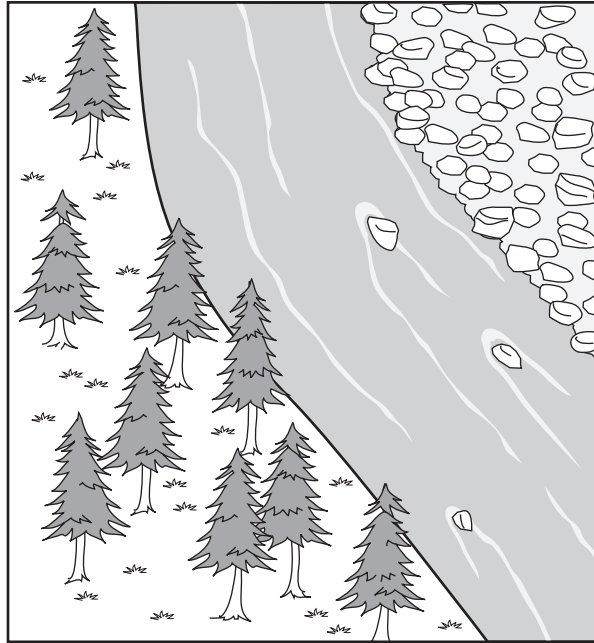


**Which shape is MOST like the one made by connecting the bases on the baseball field?**

- 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



**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

**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**

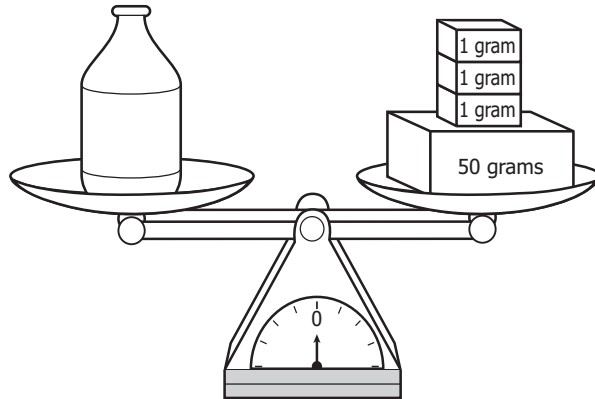


**A sand dune is shown. Which of these causes sand dunes to form?**

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



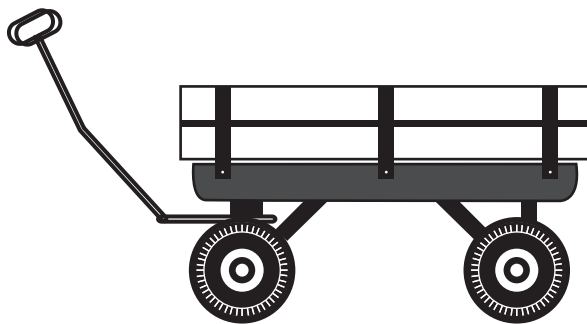
15



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

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

16



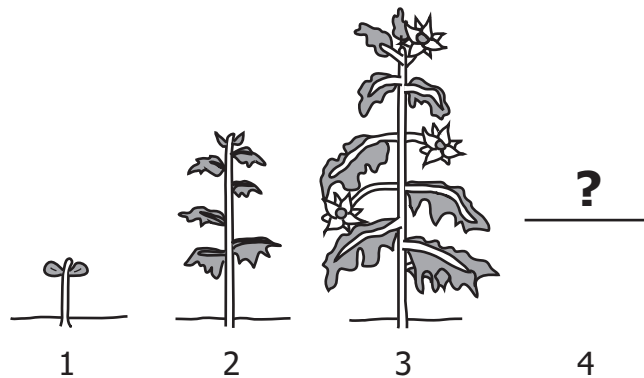
**Which kind of work is made easier by the wheels of a wagon?**

- 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

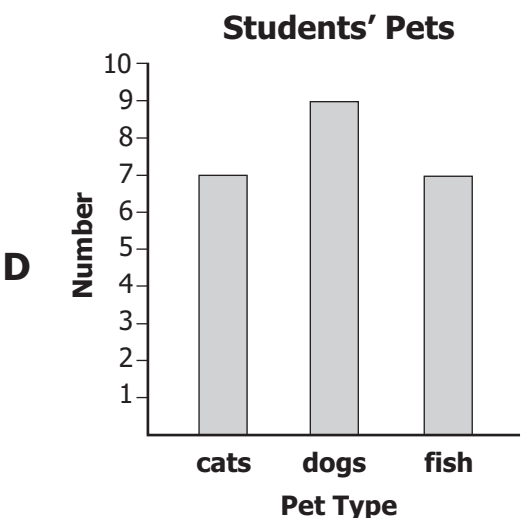
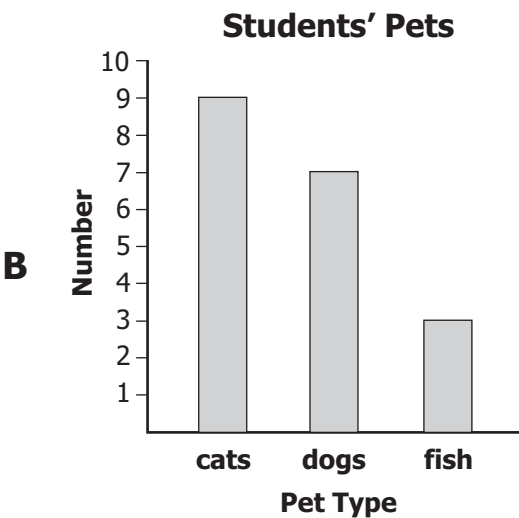
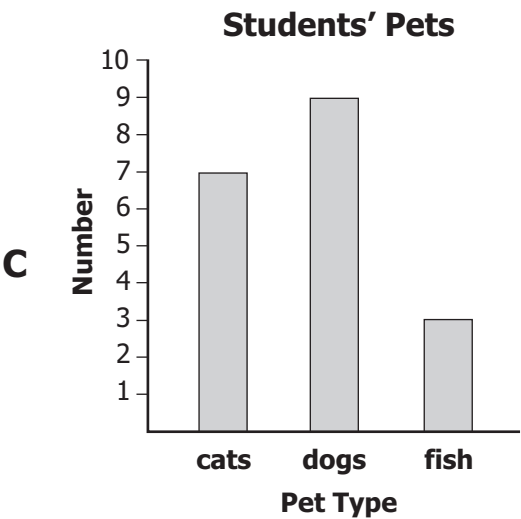
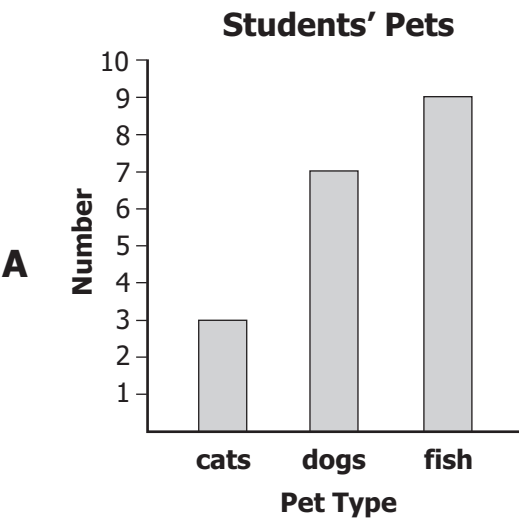
**18**



**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?

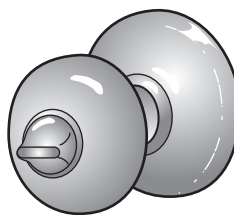


**20 Which machine uses a wheel and axle?**

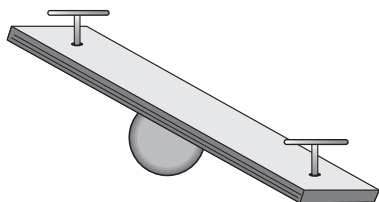
**F**



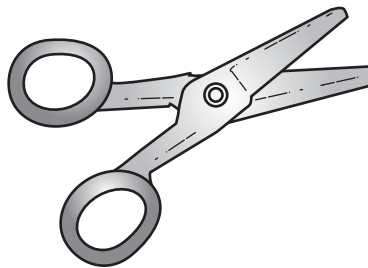
**H**



**G**



**J**



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

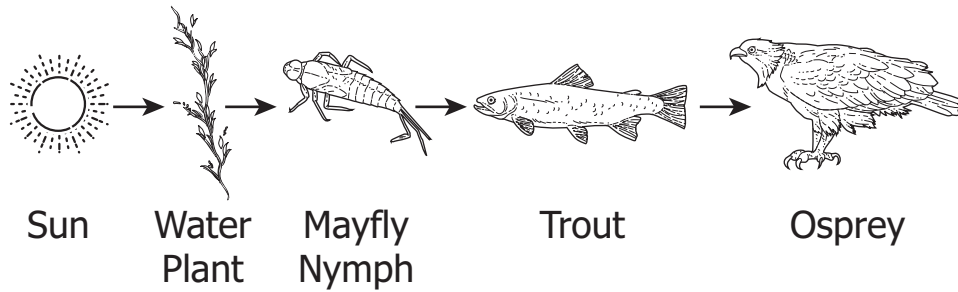
- A** Wind
- B** Water
- C** The Sun
- D** The Moon

**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**

<b>Student</b>	<b>Distance Measured (meters)</b>
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

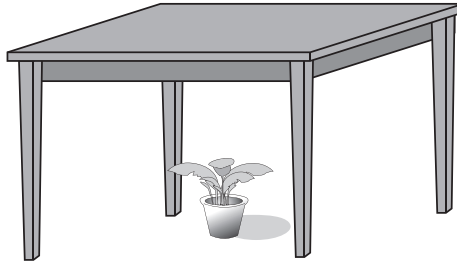
**36 Which causes the GREATEST change in a grassy field over time?**

- 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

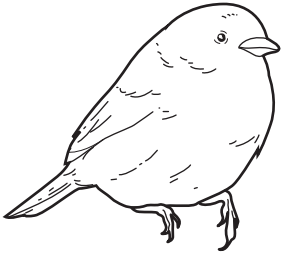


**A plant is put in a pot of soil and placed under a table. The plant is given water every week, but it stops growing. The plant MOST likely needs —**

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

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

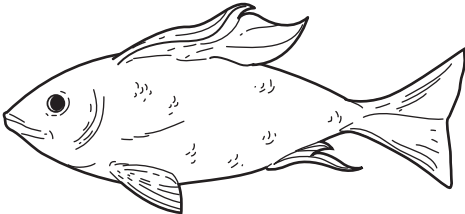
**A**



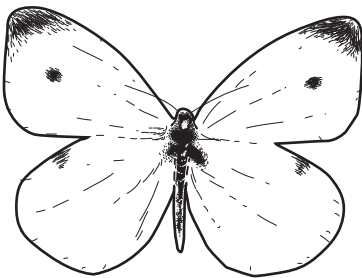
**B**

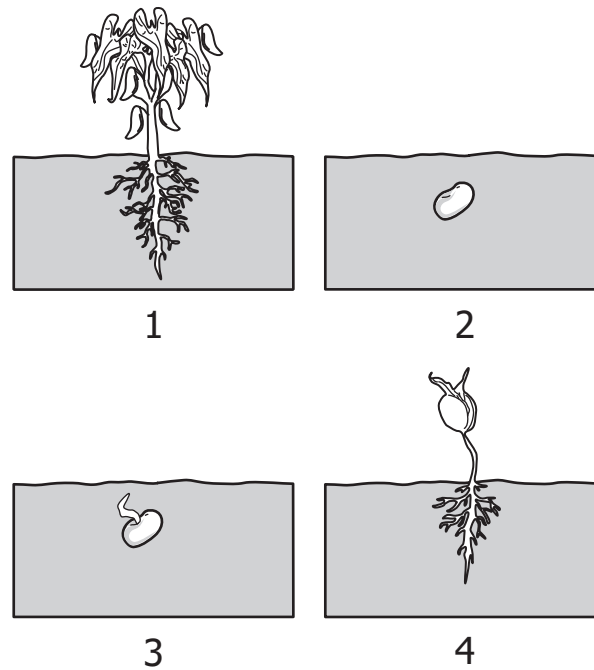


**C**



**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