



**NEW ENGLAND
COMMON ASSESSMENT PROGRAM**

**Released Items
2009**

**Grade 4
Science**

Science

1 A student concludes that the material in a round bowl is a liquid. Which statement about the material **must** be true?

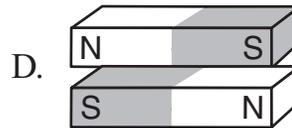
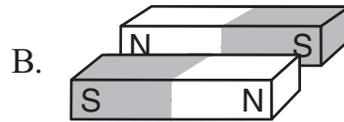
- A. The material is clear.
- B. The material weighs 1 kg.
- C. The material has a temperature of 35°C.
- D. The material takes the shape of its container.

2 Susan uses 1000 g of plastic building blocks to build a tower. Janet takes the tower apart and uses all of the blocks to build a ship.

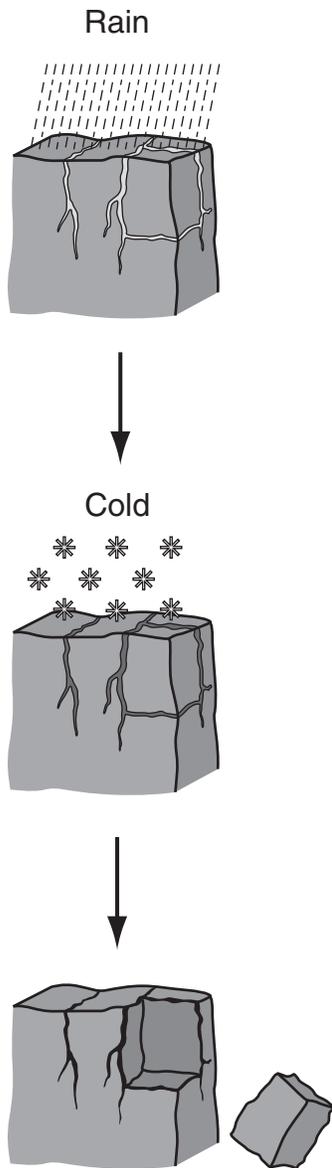
What is the weight of the ship?

- A. 500 g
- B. 1000 g
- C. 1500 g
- D. 2000 g

3 A student wants to arrange two bar magnets so they repel each other. Which diagram shows the **best** arrangement for the magnets?



- 4 Students studied the rock diagram shown below.



What does the diagram show?

- A. how water moves rock from place to place
- B. how different types of rock are formed
- C. how rock gets moisture
- D. how freezing and thawing of water breaks rock

- 5 Fourth-grade students use a rain gauge to measure how much rain falls every day for three weeks. They record the information.

At the end of three weeks, which question can the students **best** answer using their data?

- A. When will the next rainfall happen?
- B. How much rain does grass need?
- C. How much rain soaks into the soil?
- D. Does it rain the same amount every day?

- 6 The table below lists the temperature at different times on a summer day.

Summer Temperatures

Time	Temperature
7:00 A.M.	72°F
9:00 A.M.	79°F
11:00 A.M.	84°F
1:00 P.M.	88°F
3:00 P.M.	93°F
5:00 P.M.	90°F
7:00 P.M.	84°F

How does the temperature change during the day?

- A. The day begins warm, cools down, and then heats up.
- B. The day begins warm, heats up, and then cools down.
- C. The day begins cool, cools down more, and then heats up.
- D. The day begins cool, heats up, and then heats up more.

- 7 The life cycle of butterflies has four stages. One of these stages is pictured below.



What is the **next** stage in the life cycle of butterflies?



8 The table below lists foods some birds like to eat in nature.

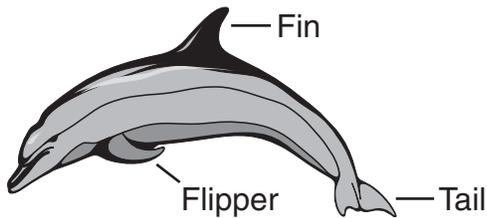
Food Birds Eat

Food	Bird			
	Blue Jay	Cardinal	Chickadee	Robin
Berries	Yes	Yes	Yes	No
Earthworms	No	No	No	Yes
Insects	Yes	Yes	Yes	Yes
Seeds	Yes	Yes	Yes	No

In New England, seeds and berries are the only foods available for most birds during the winter. Which bird moves away to find food during the winter?

- A. blue jay
- B. cardinal
- C. chickadee
- D. robin

9 The labeled diagram below shows structures of a dolphin.



The flipper of a dolphin is similar to which structure of a human?

- A. arm
- B. ear
- C. hip
- D. rib

- 10 Apple trees and some animals depend on each other.
- a. Describe **two** ways apple trees help some animals survive.

 - b. Describe **two** ways some animals help apple trees survive.