

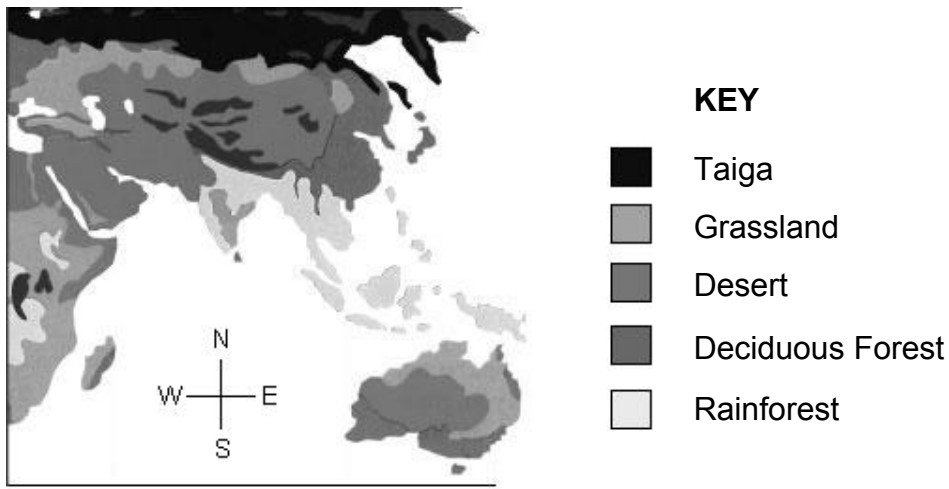
**McGraw-Hill Science © 2000, Texas Edition
TAKS Practice Test**

**Grade 5, Chapter 12
Living Things Interact**

Name _____

Date _____

Use the map and your knowledge of science to answer Questions 1 and 2.



Biomes of Asia

- 1 To observe the greatest number of biomes in Asia, how would you travel?
 - A From north to south down the length of the continent
 - B From east to west across the width of the continent
 - C Within one country, such as China or India
 - D Down a long river, such as the Ganges

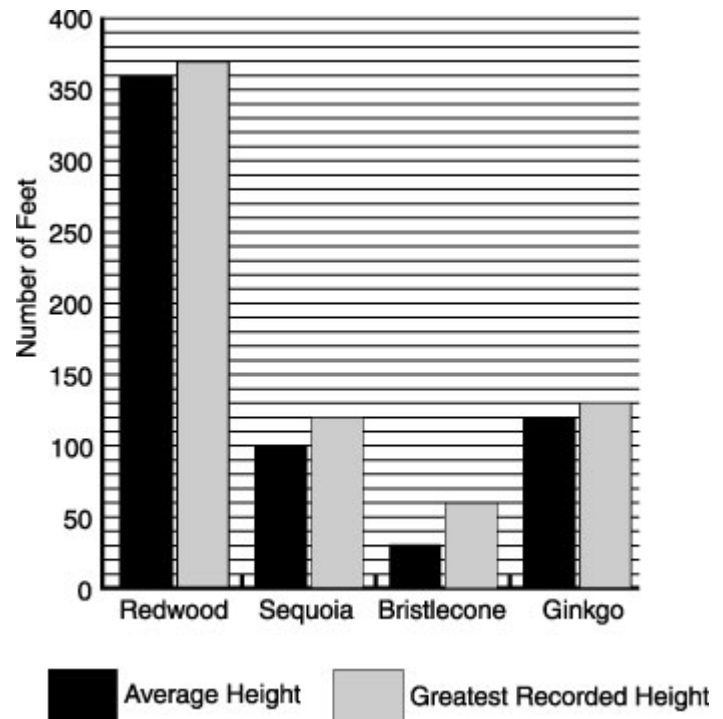
- 2 What if you were lost in the taiga biome and wanted to find your way to a warmer biome? Which of these tools would be most useful?
 - A Magnet
 - B Compass
 - C Balance
 - D Spring scale

- 3 The barrel cactus lives in the Sonora Desert. It has adapted a thick, tough stem that has many folds. This adaptation is important because it helps the barrel cactus to _____.
- A keep water inside
 - B lose water easily
 - C take in more sunlight to use in photosynthesis
 - D move minerals and sugars to its roots

Use the chart below and your knowledge of science to answer Questions 4 and 5.

- 4 Which kind of tree has the largest difference between its greatest recorded height and average height?
- A Redwood
 - B Sequoia
 - C Bristlecone
 - D Ginkgo
- 5 What conclusion can you draw from the information in this chart?
- A Most redwood trees are 360 meters tall.
 - B All redwood trees are taller than sequoias and ginkgos.
 - C At least some bristlecone trees shorter than 30 meters.
 - D Bristlecones are the shortest kind of trees.

Average Height and Greatest Recorded Height of Four Kinds of Trees



6 A tick will attach itself to the skin of a dog, cat, or other animal. It fills its body with the animal's blood. This harms the animal. The niche of the tick is as a _____.

- A** producer
- B** parasite
- C** predator
- D** host

7 Evidence suggests that an asteroid may have struck Earth millions of years ago. Dust from the collision may have been so thick it blocked sunlight all over the planet.

What is the most likely reason that this event would have killed all of Earth's dinosaurs?

- A** The dinosaurs choked on the dust.
- B** The asteroid hit the dinosaurs.
- C** Mammals killed the dinosaurs for food.
- D** Many plants died, leaving the dinosaurs without food.

Use the illustrations, text and your knowledge of science to answer Questions 8, 9, and 10.

Illustrations of Farmer Tanick's farm, abandoned 1990

June,
1991



June,
1992



August,
1994



In 1990, Farmer Tanick moved away from his corn farm. The following year, a team of scientists visited the farm to observe it. They returned every summer for four years. No one else visited the farm or lived on the farm during this time.

Some of the scientists' observations are shown in the chart.

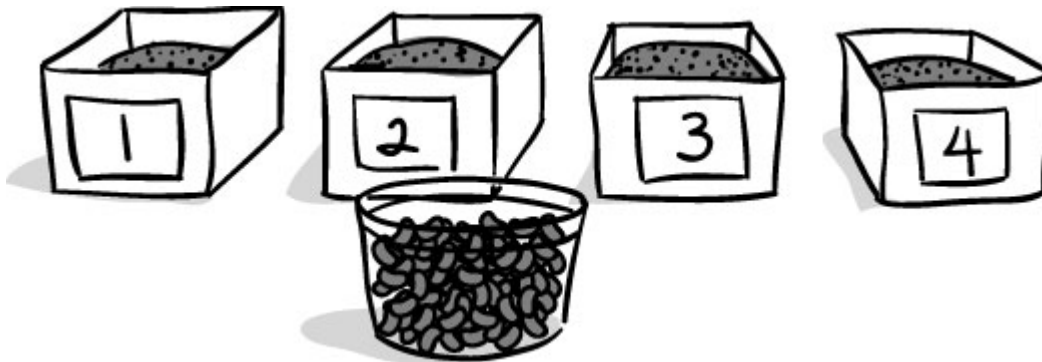
Date	Observations
June 1991	Crabgrass and other grasses are growing. Mice and insects scurry among the grass. Hawks and eagles fly overhead.
June 1992	Taller weeds are growing, and there is less crabgrass. We see rabbits and seed-eating birds.
July 1993	<Journal damaged>
August 1994	Many pine seedlings and young trees are growing. Weeds are dying out. We observed a pheasant, an opossum, and a skunk.

- 8 What is the most likely reason that the weeds were dying in August, 1994?
- A The pheasants, opossums, and skunks were eating too many weeds.
 - B The pine trees were blocking the sunlight.
 - C The pine trees were taking up all the water in the soil.
 - D Someone sprayed chemicals that kill weeds.
- 9 What if the scientists returned to the farm in the year 2020? If no humans had changed the land, predict what they would observe.
- A An ecosystem much like the farm in August, 1994
 - B A pine forest with many adult pine trees, and many young pine seedlings
 - C A pine forest with many adult pine trees, and seedlings of other trees that grow well in shade
 - D A pond, marsh, or lake

- 10 What conclusion can be drawn from the scientists' observations?
- A Ecosystems stay the same for many years.
 - B One ecosystem may replace another over time.
 - C Although an ecosystem's plants and animals may change, the ecosystem does not change.
 - D No conclusion is possible because of the missing entry for 1993.

Use the following information, the illustration, and your knowledge of science to answer Questions 11, 12, and 13.

How does crowding affect bean plants? A student conducts an experiment to answer this question. He is given four milk cartons, labeled 1, 2, 3, and 4. Each milk carton contains half a liter of soil. He also is given a container of bean seeds.



- 11 The student plants bean seeds in each carton. Which of these procedures would work best for this experiment?
- A Plant one seed in each carton.
 - B Plant six seeds in each carton.
 - C Plant one seed in Carton 1, three seeds in Carton 2, six seeds in Carton 3, and twelve seeds in Carton 4.
 - D Plant all of the seeds in Carton 1.

- 12** Should the student give each carton the same amount of water? Why or why not?
- A** Yes. The experiment should test the effects of crowding, not water.
 - B** Yes. The experiment should test the effect of water on bean plants.
 - C** No. The crowded bean plants need more water.
 - D** No. The crowded bean plants need less water.
- 13** After a few days, the student observes young bean plants sprouting in each container. What would be the best procedure to follow next?
- A** Count the seedlings, then stop the experiment.
 - B** Count the seedlings, then present the numbers in a chart.
 - C** Count the seedlings, record observations, and make new observations as the seedlings grow.
 - D** Rip out the seedlings and begin the experiment again.
- 14** A pair of birds builds its nest in a tree. The tree protects the birds and their young. The birds do not harm the tree. This relationship is an example of _____.
- A** parasitism.
 - B** mutualism.
 - C** commensalism.
 - D** a predator/prey relationship.

ANSWER KEY and CORRELATIONS

Question	Answer	TAKS	McGraw-Hill Science Grade 5 textbook
1	A	5.2E, 5.4A	p. 545
2	B	5.4A	p. R10
3	A	5.9A	p. 530
4	C	5.2E	p. R23
5	C	5.2D	p. R23
6	B	5.9B	p. 534
7	D	3.8C	p. 537
8	B	3.8C	p. 560
9	C	3.8C	p. 560
10	B	3.8C	p. 560
11	C	5.2A, 3.8B	p. 527
12	A	5.2D	p. 527
13	C	5.2A	p. 527
14	C	5.9B	p. 535