Name \_\_\_\_\_ Date \_\_\_\_\_
Class/Grade

# 1 Expectation: 5.9(A)

An island environment has limited insects available. Most of the insects that are available are found deep in tree trunks. If insects are the primary food source, then which of the following birds would survive the best in this environment?

A



C



В



D



# 2 Expectation: 5.9(A)

Polar bears will eat fish, squid, crabs, and many other things, but they like to eat seals. Why would a polar bear want to catch and eat one seal rather than five fish?

- **F** Seals are warm-blooded and fish are not.
- **G** Unlike fish, seals do not have scales and tiny bones.
- **H** One seal is bigger than five fish.
- **J** The bear will get more energy than it will spend.

#### 3 Expectation: 5.9(A)

Snakes are cold blooded because their body temperatures are not internally regulated. On a hot summer day, which of the following is the least likely way a snake would interact with its nonliving environment?

- **A** Drinking water from a nearby stream
- **B** Basking in the sun
- **C** Digging a hole to burrow in the sand
- **D** Hiding under a cool rock

### 4 Expectation: 5.9(A)

Many carnivorous plants obtain critical nutrients by trapping, killing, and digesting animals. What is the most likely cause for the evolution of this unique ability?

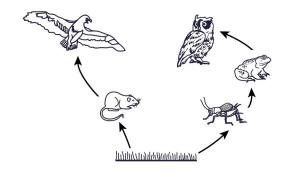
- **F** It decreases the number of harmful insects that threaten the plants' survival.
- **G** It is more efficient to digest insects than to get nutrients from the soil.
- **H** The plants live in environments where there is little sunlight.
- **J** The plants live in habitats where the soil contains few nutrients.

# 5 Expectation: 5.9(A)

Ling walked down a wide trail in an ecological conservation area. She noticed that the trees were leaning toward the trail, making a canopy. What caused the trees to lean?

- **A** They were struggling to reach fresh air.
- **B** They had been given too much water.
- **C** They were growing toward the sunlight.
- **D** They were trying to pollinate outdoor plants.

**Directions:** The diagram below shows a food web. Use this diagram to answer any questions that follow.



## 6 Expectation: 5.9(B)

A mouse receives energy directly from a -

- **F** producer such as grass.
- **G** consumer such as an owl.
- **H** decomposer such as a bacterium.
- **J** consumer such as a frog.

# 7 Expectation: 5.9(B)

Grass receives energy directly from the -

- **A** frog.
- B owl.
- C Sun.
- **D** hawk.

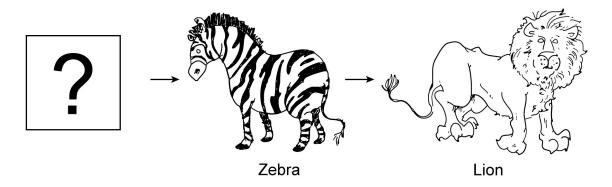
## 8 Expectation: 5.9(B)

In a harsh mountain range, the energy from a producer such as a lichen will transfer to a  $\overline{\phantom{a}}$ 

- **F** consumer such as a mountain goat, then to a decomposer such as an earthworm.
- **G** decomposer such as a mushroom, then to a consumer such as an eagle.
- **H** consumer such as a mouse, then to an energy source such as the Sun.
- **J** producer such as a moss, then to a consumer such as a rattlesnake.

#### 9 Expectation: 5.9(B)

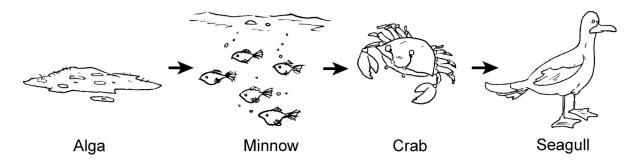
A type of organism is missing from the food chain shown below.



This type of organism is **NOT** able to -

- **A** grow roots and leaves.
- **B** run and jump.
- **C** live on the ground.
- **D** get energy from the Sun.

**Directions:** The illustration below shows a food chain found in an ocean ecosystem. Use this diagram to answer any questions that follow.



#### 10 Expectation: 5.9(B)

What is the main role of the alga in this food chain?

- **F** To recycle nutrients on the ocean floor
- **G** To convert sunlight into usable energy for the other organisms
- **H** To provide the animals with shelter from sunlight
- **J** To break down the remains of the other organisms

## 11 Expectation: 5.9(C)

In Yellowstone National Park, rangers noticed that a cottonwood grove contained large numbers of older trees and tiny seedlings, but very few young trees. They realized that elk were eating many of the seedlings before they had a chance to grow. Which scenario would best explain this trend?

- A Park rangers planted a large number of cottonwood seedlings to attract elk, but the elk ate them too quickly.
- **B** Due to a food shortage, elk quickly evolved the ability to eat cottonwood seedlings.
- **C** Elk developed a distaste for all other food sources except for cottonwood seedlings.
- **D** The elk's natural predators were disappearing, so there were more elk to eat the seedlings.