## Now It's Your Turn

After you answer the practice questions, you can check your answers to see how you did. If you chose a wrong answer to a question, carefully read the answer explanation to find out why your answer is incorrect. Then read the explanation for the correct answer.

#### Question 11

When a goat eats grass, what form of energy passes directly from the grass to the goat?

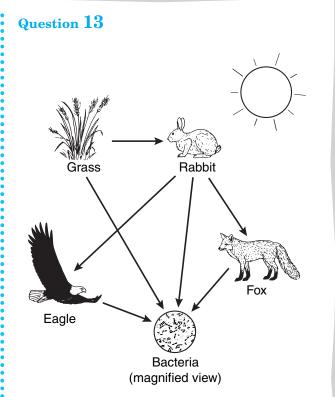
- A Heat
- B Light
- C Electrical
- **D** Chemical



#### Question 12

When a softball player swings at a pitched ball, which of the following sets of body systems must work most closely together?

- A Skeletal and immune
- B Nervous and muscular
- C Circulatory and digestive
- **D** Respiratory and excretory



In the food web shown above, which organism is a decomposer?

- A Rabbit
- **B** Eagle
- C Bacteria
- **D** Fox



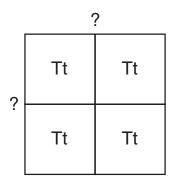


Grass → Rabbits → Wolves

Which statement best describes a likely relationship between the organisms in the food chain shown above?

- **A** If the rabbit population decreases, the wolf population will increase.
- **B** If the grass population decreases, the wolf population will remain the same.
- **C** If the rabbit population increases, the grass population will increase.
- **D** If the grass population increases, both the rabbit and wolf populations will increase.

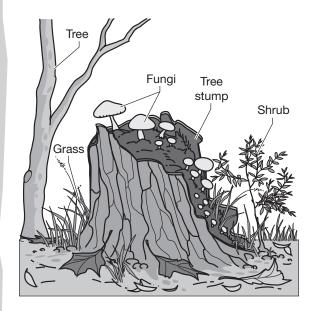
## Question 15



Tall plants (T) are dominant over short plants (t) in peas. A short (t) pea plant crossed with an unknown parent produced 172 offspring that were all (100%) tall. Which of the following crosses would most likely produce these offspring?

- $\mathbf{A}$   $TT \times tt$
- $\mathbf{B}$   $\mathrm{TT} \times \mathrm{TT}$
- $\mathbf{C}$   $\mathrm{tt} \times \mathrm{tt}$
- $\mathbf{D}$  Tt  $\times$  tt





The fungi shown in the picture above are decomposers. Decomposers are an important part of an ecosystem because they —

- A produce oxygen
- B provide food for carnivores
- C break down dead organisms
- D convert sunlight to food energy

## Question 17

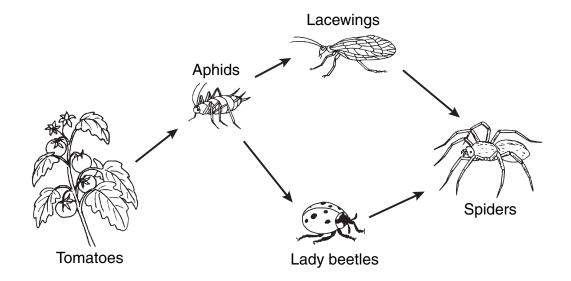
Plants → Grasshoppers → Birds

What is the original source of energy for all the organisms in the food chain shown above?

- A Soil particles
- B Carbon dioxide
- C Sunlight
- **D** Oxygen

Answer Key: page 142





In the food web shown above, which organism's food supply would be least affected by a spray that kills large numbers of aphids?

- A Tomatoes
- B Lacewings
- C Lady beetles
- **D** Spiders



Which natural event would be most likely to cause succession in a grassy field?

- **A** All the soil remains wet for several days after a heavy rain.
- **B** Most of the grass is blown flat by a strong wind.
- C Many grass plants die after a long period of no rainfall.
- **D** The grass leaves are injured by a frost.



# Apple Orchard Data

Location	Average May Temperature (°C)	Full Bloom Date	Ripe Fruit Color	Average Fruit Size (g)	Days from Bloom to Harvest
Tyler, TX	22	May 22	Green	252	143
Austin, TX	24	May 17	Green	263	147
Victoria, TX	25	May 10	Green	237	150

Several orchards in different regions were planted with apple trees produced from a single parent tree. The table above shows data gathered at the three apple orchards. Which characteristic in the table above is most likely inherited and not affected by the environment?

- A Full bloom date
- B Ripe fruit color
- C Average fruit size
- $\boldsymbol{D}\quad \text{Days from bloom to harvest}$

