



## Discuss Your Answers

Question about the picture on page 39: The squirrel eats the apples. As it eats the apples, it helps spread apple seeds around. The bird is a bird of prey (you can tell by the hooked, sharp beak). It eats squirrels.

**1** Water is part of a lake *ecosystem*, but because it is not a living organism, it is not part of a lake *community*. If an organism is reduced in number, this will affect what it eats. Would this also affect other organisms that eat the same thing?

SOL 4.5.c

**2** A *producer* makes its own food from the sun's energy. It does not eat other organisms. Which choice do you *know* does not eat other living creatures?

SOL 4.5.c

**3** Where does the algae get its energy from? That will tell you its role in the food web.

SOL 4.5.c

**4** A *behavioral adaptation* is something an organism *does*. Which choice is something penguins do, and not part of their body?

SOL 4.5.a

**5** *Habitats* must provide animals with what they need to live, including food and a safe, or relatively safe, place to live and raise young. Think about how much meat 50 - 70 pounds per day is. Which habitat would most likely provide tigers with enough prey while *also* being a place they could safely live?

SOL 4.5.d

**6** What would most likely happen to something if its home is taken away?

SOL 4.5.d

**7** The question asks what would help cats hunt *at night*. Ask yourself which of the choices *you* would want if you had to hunt at night!

SOL 4.5.a

**8** Use what you know about lions and polar bears. They live in very different places. They have very different behavior (for example, polar bears swim and live alone; lions climb trees and live in groups). They have different physical traits (for example, polar bears have lots of fat to keep warm; lions see well in the dark). But they are both the biggest predators in their areas. Which choice is about what lions and polar bears do?

SOL 4.5.a, 4.5.d

**9** Look at the butterfly and frog life cycles above the question. Which stage of each organism is the one that reproduces, or lays eggs? Now compare that to the fruit fly life cycle: which is the matching or equivalent stage?

SOL 4.5.e

**10** Look at the diagrams on the previous page carefully. You are looking for something that is **not** in animal cells but *is* in plant cells. Go through the choices one by one if that helps you.

SOL 5.5.a

**11** *Chloroplasts* create food in plant cells. A *cell wall* helps give a plant cell its rectangular shape. A *vacuole* provides storage. What does the nucleus do?

SOL 5.5.a



**12** Cells have only one nucleus. Which structure can animal cells have more than one of? (*Hint*: this is the structure that is much larger in plant cells.)

SOL 5.5.a

**13** Read the statement carefully. What are you looking for? Eliminate any answers that do not fit. *Hint*: This is the thing that uses sunlight to make food in plant cells.

SOL 5.5.a

**14** The type of plant in the picture is a fern. The spots are on the underside of the leaf.

SOL 4.4.b

**15** Not enough sunlight for photosynthesis is part of the reason some plants go dormant. However, there is more to it than this. Which answer choice is similar to choice A, but broader?

SOL 4.4.d

**16** The *leaves* produce food for the plant through photosynthesis. *Roots* absorb materials the plant needs. The *flower* is necessary for reproduction. What does the stem do?

SOL 4.4.a

**17** Three of the choices refer to female parts of the plant. Those choices go together. *Hint*: if you have trouble remembering the answer, think of the “men” in the word “stamen.”

SOL 4.4.b

**18** A *by-product* is something that comes about as a result of doing something else. It is not the main reason for doing that thing. For example, you could call “getting exercise” a by-product of walking your dog. The purpose of photosynthesis is to use chlorophyll and carbon dioxide to create food for the plant. What is given off while that is happening?

SOL 4.4.c

**19** The key word is **not**. Which answer choice does not help carry pollen from one plant to another?

SOL 4.4.b

**20** The roots are underground, where it is always dark, so putting the plant in a dark closet would not affect them. Carbon dioxide is given off during respiration, or breathing. What function requires light, especially sunlight?

SOL 4.4.a, 4.4.c

**21** For photosynthesis, you need water, carbon dioxide, and chlorophyll. Which of the listed plant parts either hold chlorophyll or take in and transport water? The correct answer will be the part that does **not** do these things.

SOL 4.4.a, 4.4.b, 4.4.c

**22** A mouse is a *vertebrate*, while an earthworm is not. What do all vertebrates have?

SOL 5.5.d

**23** First, determine whether the choice is even a plant or not—not everything that looks like a plant, or which just “sits there and grows,” is a member of the Plant kingdom. Once you’ve determined that, ask yourself if the choice has tube-like structures (such as those which make up stems or trunks) that carry food and water. If it does, it is a *vascular* plant.

SOL 5.5.b, 5.5.c

**24** If it is a *fungi*, it is not a plant. Which answer choice shows a kind of fungus? (*Hint*: it is the choice that does not need light, because it does not conduct photosynthesis—which choice can grow in dark places?)

SOL 5.5.b