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What Color Are Polar Bears?

What color are polar bears? White, of course! Why, then, were polar bears in a certain zoo turning green?

discovery, greenish-looking polar bears were also reported in several other zoos.

That is when scientists were called. The scientists discovered that the green color was caused by plants called *algae* (ăl'jē). Algae are simple plants found in fresh or salt water and in damp places on land. They use sunlight to make their own food and are an important food source for animals that live in the water.

When the scientists used microscopes to inspect the bears' fur, they found that the algae

The keeper in the San Diego Zoo blinked her eyes. She could not believe what she was seeing. The polar bears had a greenish look! They were no longer white, as everyone knows polar bears should be. After this discovery,

were actually growing inside the hollow shafts of the stiff hair on the bears' bodies. Even inside the hairs, the plants received sufficient sunlight to live and grow and give the bears' fur a greenish look.

The scientists examined the algae and discovered that they belonged to a common freshwater species that grows in lakes or swimming pools. The scientists had a theory that the algae in the bears' pools probably got into the hair shafts through breaks in the hair tips.

Although the algae did not harm the bears, the scientists thought it best to use a salt solution to kill the plants. Visitors to a zoo would expect to see white polar bears—certainly not green ones.



QUESTIONS

1. The word *algae* is used to describe simple _____ found in fresh or salt water and in damp places on land.
2. What did scientists use to inspect the fur on the bears' bodies?
3. The polar bears that were living in zoos were turning _____.
4. According to the story, in order to survive, algae must have
 - a. sunlight.
 - b. fresh water.
 - c. salt.
5. The natural home of polar bears is the freezing cold Arctic. Their true color is useful because it
 - a. camouflages, or hides, them from enemies.
 - b. makes it easier for scientists to spot them.
 - c. attracts algae, which help the bears' fur to grow.
6. The story says that the scientists had a theory about how the algae got into the bears' fur. The word *theory* means about the same as
 - a. proof.
 - b. idea.
 - c. solution.
7. The algae found in the bears' fur belonged to _____ species.
 - a. an unusual
 - b. a harmful
 - c. a common
8. For some reason, your green houseplants are wilting and dying. It could be that
 - a. there is not enough salt in the plants' soil.
 - b. the plants are not being watered properly.
 - c. they are not located in a place that is dark enough for green plants.

Tiny Invaders

Are there ways to fight viruses?

Viruses are tiny organisms that enter your body, invade your cells, and can make you sick. Once within your cells, the virus takes control of the cells' machinery. Inside your cells, the virus makes many copies of itself. These new viruses leave the cell and move on to infect other cells. You get sicker.

Viruses cause flu, colds, inflammation of the brain and heart, and polio. You catch viruses from other people, animals, or even the bite of an insect.

The body has a few natural defenses against viruses. Only a vaccination offers any hope for preventing viral infections. While there are some anti-viral medicines, the side effects often make the virus sufferer even sicker.

But now medical scientists are using a new method to develop anti-viral medicines that have few, if any, side effects. Using powerful microscopes, they determine exactly what the virus looks like and how it works. Then the scientists make a medicine that locks onto the virus, blocking it at some point in its infection process. Two new anti-viral medicines, Relenza and Tamiflu, keep a virus from escaping from an invaded cell and infecting other cells. Another new medicine

keeps the virus from making copies of itself.

The newest medicine, pleconaril, keeps the virus from invading the cell. This medicine, still being tested, appears to disable viruses that cause many serious infections including meningitis, an infection of the covering of the brain. And pleconaril pills may be the cure for the common cold.



QUESTIONS

1. Tiny organisms that invade your cells are called
 - a. infections.
 - b. viruses.
 - c. anti-viral medicines.
2. Viruses make you sick when
 - a. you breathe them in.
 - b. someone sneezes.
 - c. they invade your cells.
3. Viruses make you sick because
 - a. they move from cell to cell.
 - b. they make copies of themselves.
 - c. you get a fever.
4. Select the event that might cause you to catch a virus.
 - a. You cut your hand.
 - b. Someone sneezes on you.
 - c. You drink sour milk.
5. Vaccination
 - a. doesn't prevent a virus infection.
 - b. cures the common cold.
 - c. prevents a virus infection.
6. The newest anti-viral medicine is
 - a. pleconaril.
 - b. Relenza.
 - c. Tamiflu.
7. Relenza and Tamiflu would be most likely to keep the flu from passing from person to person because they _____.