

An Unlikely Parasite: The Mistletoe

During the holidays, many people hang mistletoes over doorways. People share kisses under this evergreen plant. It is a popular Christmas tradition. But don't let the image of a romantic plant used during the happy times of the holidays fool you. In the forests where they're from, mistletoes can do some real damage. Let's take a look at how and why.

The mistletoe plant is evergreen. This means it has leaves that remain green throughout the year. It is also poisonous and has white berries and small, yellow flowers. The mistletoe lives on other plants, taking water and nutrients from these plants. For this reason, mistletoes are considered parasites.



Photograph of white mistletoe berries

The white berries of the mistletoes contain seeds. Some birds and mammals like to feed on these berries. When they do, the seeds may attach to the animal eating the berries. The animal may carry the seeds to another part of the tree or shrub. They may also carry the seeds to another plant altogether. The seeds start to grow roots that dig through the bark of the tree or shrub. The roots grow into the tissues of the plant they've taken over. That's how mistletoes take nutrients and water away from the host plants. Mistletoe can be hard to remove once it infects a plant. The best way to fight off a mistletoe infestation is to cut off the infected branch completely. If the mistletoe takes over more parts of the plant, it can start to weaken the plant and make it harder for it to grow.

As mistletoes grow in the trees, they become a thick mix of branches and stems. This big mass is sometimes called a "witch's broom." Some animals nest in these witches' brooms. These animals include chickadees, house wrens, and most Cooper's hawks.

Name: _____ Date: _____

1. The mistletoe plant is evergreen. What does this mean?

- A. It has leaves that remain red throughout the year.
- B. It has leaves that fall off throughout the year.
- C. It has leaves that remain green throughout the year.
- D. It takes water and nutrients away from other plants.

2. Mistletoes live on other plants. The text describes the effects of mistletoes on these plants. What is one of these effects?

- A. They cause the plants to grow stronger.
- B. They cause the plants to grow weaker.
- C. They cause the plants to take in more water and nutrients.
- D. They cause the plants to turn white.

3. Read the following sentences from the text.

The white berries of the mistletoes contain seeds. Some birds and mammals like to feed on these berries. When they do, the seeds may attach to the animal eating the berries. The animal may carry the seeds to another part of the tree or shrub. They may also carry the seeds to another plant altogether. The seeds start to grow roots that dig through the bark of the tree or shrub. The roots grow into the tissues of the plant they've taken over. That's how mistletoes take nutrients and water away from the host plants.

What conclusion about some animals does this information best support?

- A. Some animals can turn into parasites that infect plants.
- B. Some animals can cause other animal species to die off.
- C. Some animals grow weaker when they eat mistletoe berries.
- D. Some animals help mistletoes infect other plants.

4. What is one positive effect mistletoes have on the ecosystems where they grow?

- A. They take water and nutrients away from plants.
- B. They have leaves that remain green throughout the year.
- C. They provide food to some animals.
- D. They have seeds which can grow roots into the barks of trees and shrubs.

5. What is the main idea of this text?

- A. Mistletoes have leaves that stay green throughout the year, white berries, and small, yellow flowers.
- B. Mistletoes become a thick mix of branches and stems as they grow on other plants.
- C. During the holidays, many people hang mistletoes over doorways and kiss under these evergreen plants as a popular Christmas tradition.
- D. Mistletoes are evergreen plants that can cause other plants they live on to become weak by taking nutrients and water from them.

6. Read the following sentences from the text.

"As mistletoes grow in the trees, they become a thick mix of branches and stems. This big mass is sometimes called a 'witch's broom.'"

Based on the text, why might this mass of branches and stems be called a witch's broom?

- A. because it looks like a witch's broom
- B. because it can help people fly like a witch's broom
- C. because it can be used to clean floors like a witch's broom
- D. because it is popular during Halloween like a witch's broom

7. Choose the answer that best completes this sentence.

The mistletoe lives on other plants, taking water and nutrients from these plants. _____, mistletoes are considered parasites.

- A. Therefore
- B. In addition
- C. However
- D. Meanwhile

8. As mistletoes grow in the trees, they become a thick mix of branches and stems. What nests in this big mass?

9. How can parasites best be defined? Use information from the text to support your answer.

10. Explain how mistletoes can both hurt and help other living things using information from the text.
