

Hibernation Workshop

Question 1: You are probably familiar with Groundhog Day and that in the Spring groundhogs wake up from their Winter sleep called hibernation. Groundhogs are one of the classic examples used to discuss the topic of hibernation. But what is the actual definition of the term: hibernation. Use your resources and provide a "textbook" definition below.

Question 2: What are some of the animals/animal types that hibernate?

Question 3: Why do Reptiles and Amphibians need to hibernate?

When snakes hibernate, the location that it sleeps in has a special name. What is the name of this location and does the snake sleep alone in this location?

Question 4: Most frogs survive winters by hibernating under water, in ponds, lakes, and streams. They become cold and dormant. Since water maintain constant temperature zone under the ice, their frog's body temperature never falls below freezing point. However, the Wood Frog are known for hibernating on land in a different fashion. How do they hibernate and what protects them during this period?

Question 5: Most people know that bears sleep through the winter. But, are bears truly hibernating? What is their sleep called and how does it differ from true hibernation?

What are some other animals go into this torpor state?

Question 6: Many individuals are aware that several bat species hibernate. However, there is a disease that is affecting many bat species and hinders their hibernation. What is this disease called and what does it do to hibernating bats?

Question 7: If you have completed the Insect Workshop, you should be able to guess where this question is going. Insects go through a period of suspend development that is triggered by unfavorable environmental conditions. While performing the same function as hibernation, it has a different name. What is this process called?

Many kinds of insects experience this process. It can occur in different life stages depending on the insect. Use your resources to find and list some insects that use this process and what stage of life cycle they are in when they do.

Question 8: How do animals that hibernate deep underground and away from outside stimuli know when to wake up?

Question 9: Like most activities, there is an opposite strategy to hibernation called “Estivation.” Give below a “textbook” definition of this behavior.

What region of the world is this behavior most likely going to be observed in?

What are some species that perform estivation?

Question 10: As mentioned back in Question 1, Groundhog Day is tied to hibernation. What is the origin of the day?

Question 11: If a species does not hibernate to meet the challenges of the Winter season, there are two other strategies that it can apply. What are they and explain them?
