**Study Questions**

to “Squeaks and Whistles, Grunts and Hums”


*Minnesota Conservation Volunteer* magazine is your guide to wild things. Every other month, six times a year, the magazine arrives in your school library. Each one has a story for Young Naturalists like you. **Are you curious about wild things?** Young Naturalists tells true stories that can answer all kinds of questions such as these—

**Have you ever heard of a purple wartyback?** How about a pink heelsplitter, pimple-back, or monkeyface? All are Minnesota freshwater mussels. Read Young Naturalists stories to learn which species (kinds) of critters live in Minnesota—frogs, salamanders, snakes, wild cats, wild dogs, weasels, mice, and rabbits.

Want to **peek inside the den of a red fox** and see how the kits grow up? Are you a rock hound searching for agates? Have you ever wondered what’s alive under snow? How animals see? Why is a bluebird blue? How birds fly?

Would you like to hear the true story of **giants of the ice age**? Young Naturalists also tells you about the underground universe. You can read the story of a tiny owl that went to a hospital with an injured wing. Find out about a boy who worked in a logging camp. Read the story of Ojibwe children today hunting and gathering like their ancestors did.

Learn how to get started **camping, snowshoeing, ice fishing, or canoeing.**

Find these stories and more online at www.mndnr.gov/young_naturalists.

*Your knowledge of wild things helps you explore and enjoy the outdoors. Have fun!*
“Squeaks and Whistles, Grunts and Hums”

Study Questions


1. A great horned owl’s hoot lets other owls know ______________________ and ____________________.

2. A great horned owl’s hoot can be heard a mile away. How many football field lengths away is that?

3. True or false: A great horned owl hoots through its nostrils?

4. Where do American toads winter? ______________________

5. How long can a male American toad trill? ________________

6. As temperature increases, the American toad’s call becomes

   A. louder
   B. softer
   C. faster
   D. longer
7. Where in Minnesota do freshwater drum live?

____________________________________________________________________
____________________________________________________________________

8. How does a swim bladder help fish survive? ________________________
____________________________________________________________________
____________________________________________________________________

9. Name four things a beaver uses its tail for. ________________________
____________________________________________________________________
____________________________________________________________________

10. What do the loudness and pitch of a male wolf spider’s performance tell a female spider?
    A. Whether he is the same species
    B. How strong he is
    C. What he had for breakfast
    D. What kind of leaf he is dancing on

11. What time of year are you likely to hear a dog-day cicada buzz in Minnesota? ________________________
____________________________________________________________________

12. How does a dog-day cicada make its buzzing sound?
    A. By vibrating its tymbals
    B. By tapping on its tymbals
    C. By pushing air past its vocal cords
    D. By pounding its head against a tree

13. When might you hear a downy woodpecker hammering on a tree? ________________________
____________________________________________________________________

Challenge: Why do you suppose great horned owls stop hooting after they have laid their eggs? ________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
1. When are great horned owls most likely to make territorial hoots?

____________________________________________________________________

____________________________________________________________________

2. According to scientists, why do coyotes howl?
   A. to scare away wolves
   B. to stay connected with other family members
   C. because their feet hurt from running so much
   D. to attract rabbits and other prey

3. What role does the sac play in an American toad’s call?

____________________________________________________________________

____________________________________________________________________

4. Where does a dog-day cicada spend most of its life?
   A. In trees
   B. Underground
   C. In trouble
   D. In the air

5. Name three things a downy woodpecker does with its bill.

____________________________________________________________________

____________________________________________________________________

Student Study Guide: Vocabulary

**Encounter** discover, run into

**Jackhammer** power tool used to break up rock and concrete

**Membrane** thin, flexible sheet of material

**Pack** group of animals

**Pedipalps** leglike structures spiders have near their mouths

**Pitch** how high or low a sound is

**Sonic** related to sound

**Symphony** variety of sounds being made at the same time

**Tendon** rubber-band like body part that helps muscles move other body parts

**Territorial** relating to the place an animal lives and defends from other animals

**Vertebrate** animal with a backbone

**Vibrate** rapidly move back and forth
**Student Study Guide: Vocabulary cards**

*Cut along horizontal lines, fold in the middle and tape or staple. Blanks are provided to allow you or your students to add new words or phrases.*

<table>
<thead>
<tr>
<th>To encounter something is</th>
<th>To run into something is to</th>
</tr>
</thead>
<tbody>
<tr>
<td>A jackhammer is</td>
<td>A power tool used to break up rock and concrete is a</td>
</tr>
<tr>
<td>What is a membrane?</td>
<td>A thin, flexible sheet of material is a</td>
</tr>
<tr>
<td>A pack of animals is</td>
<td>A group of animals is called a</td>
</tr>
<tr>
<td>What are pedipalps?</td>
<td>Leglike structures spiders have near their mouths are called</td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
</tr>
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<td>-------------------------------------------------------------------------</td>
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<tr>
<td>When you describe <strong>how high or low a sound is</strong>, you are describing its pitch</td>
<td>The pitch of a sound is</td>
</tr>
<tr>
<td>When something is <strong>sonic</strong>, it's</td>
<td><strong>Something related to sound</strong> is called</td>
</tr>
<tr>
<td><strong>A symphony</strong> is</td>
<td><strong>A variety of sounds being made at the same time</strong> is a</td>
</tr>
<tr>
<td>What is a <strong>tendon</strong>?</td>
<td><strong>A rubber-band like body part that helps muscles move other body parts</strong> is called</td>
</tr>
<tr>
<td>When something is <strong>territorial</strong>, it</td>
<td><strong>Something that relates to the place an animal lives and defends from other animals</strong> is called</td>
</tr>
<tr>
<td><strong>An animal with a backbone</strong> is called</td>
<td><strong>A vertebrate</strong> is</td>
</tr>
</tbody>
</table>
When something starts to **vibrate**, it

When something **moves rapidly back and forth**, it starts to