

# STUDY QUESTIONS

## TO “THE GLACIER DID IT”

Study and learn facts and ideas based on this Young Naturalists nonfiction story in *Minnesota Conservation Volunteer*, November–December 2017, [www.mndnr.gov/mcvmagazine](http://www.mndnr.gov/mcvmagazine).

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*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.

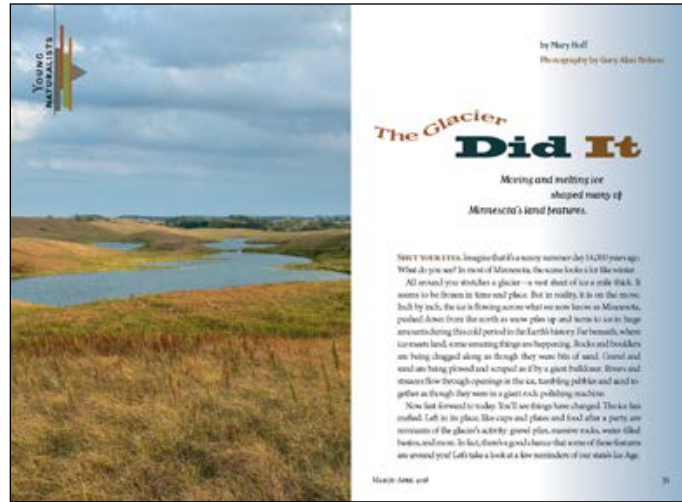
Learn how to get started **camping, snowshoeing, ice fishing, or canoeing**.

**Find these stories and more online** at [www.mndnr.gov/young\\_naturalists](http://www.mndnr.gov/young_naturalists).

*Your knowledge of wild things helps you explore and enjoy the outdoors. Have fun!*

# “THE GLACIER DID IT” STUDY QUESTIONS

Study and learn facts and ideas based on this Young Naturalists nonfiction story in *Minnesota Conservation Volunteer*, March–April 2018, [www.mndnr.gov/mcvmagazine](http://www.mndnr.gov/mcvmagazine).



1. True or false? Glaciers seem to be moving, but in reality they stay in one place.

2. **WHAT IS GLACIAL TILL?** \_\_\_\_\_

\_\_\_\_\_

3. **HOW DID MOST OF MINNESOTA'S LAKES FORM?** \_\_\_\_\_

\_\_\_\_\_

4. **WHAT DO ESKERS TELL US?**

- a. where we might find snakes if we look under rocks
- b. where rivers once ran beneath glaciers
- c. where glaciers stopped advancing
- d. how long glaciers covered Minnesota

5. **WHAT DO TERMINAL MORAINES TELL US?**

- a. where glaciers stopped advancing
- b. where the beaches of glacial lakes were located
- c. where we should build airport terminals
- d. how many times glaciers advanced and retreated

6. **NAME FOUR PLACES IN MINNESOTA WHERE YOU CAN SEE MORAINES.**

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\_\_\_\_\_

**7. HOW MIGHT A DRUMLIN PROVIDE A CLUE AS TO WHICH DIRECTION THE GLACIER THAT FORMED IT WAS TRAVELING?** \_\_\_\_\_

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**8. STRIATIONS ARE CAUSED BY** \_\_\_\_\_

\_\_\_\_\_ **SCRAPING AGAINST BEDROCK.**

**9: HOW ARE ERRATICS USEFUL TO GEOLOGISTS TRYING TO PIECE TOGETHER MINNESOTA'S PAST?**

- a. They provide clues as to what kind of rock is beneath the soil in a particular place.
- b. They provide clues as to which direction the glacier that carried it was moving.
- c. They provide reference samples for local studies.
- d. They provide clues as to where the glacier came from.
- e. a and c
- f. b and d

**10. WHAT IS LAKE AGASSIZ?** \_\_\_\_\_

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**11. NAME THREE CLUES SCIENTISTS HAVE FOUND THAT HINT AT LAKE AGASSIZ'S PAST EXISTENCE** \_\_\_\_\_

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**12.** True or false: Glaciers once covered all of Minnesota.

**CHALLENGE:** The glacial erratic in the photo on page 37 look like a large sphere split in half. If it's 10 feet high, what would be the approximate volume of both halves put together?

# MINNESOTA COMPREHENSIVE ASSESSMENT

NAME \_\_\_\_\_ PERIOD \_\_\_\_\_ DATE \_\_\_\_\_

**1. HOW ARE LAND FEATURES SHAPED BY GLACIERS LIKE CUPS, PLATES, AND FOOD LEFT OVER AFTER A PARTY?** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**2. WHY ARE ESKERS SHAPED LIKE SNAKES?**

- a. because they were formed by rivers that were curved
- b. because glaciers moved like snakes as they moved across the land
- c. because they were built by ancient people who liked snakes
- d. because they are filled with snakes

**3. WHAT IS THE DIFFERENCE BETWEEN A TERMINAL MORaine AND A GROUND MORaine?** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**4. WHY MIGHT THE PART OF A GLACIER THAT TOUCHES THE LAND BENEATH IT BE LIQUID?** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**5. WHAT DOES IT MEAN TO SAY THAT MOUNDS, PILES, AND PITS HAVE STORIES TO TELL?** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

## 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

<p><b>THE ROCK ON WHICH SOIL AND OTHER THINGS BUILD UP</b> is known as</p>	<p><b>BEDROCK</b> is the rock on which soil and other things build up</p>
<p>When two things are <b>EQUIVALENT</b>, they are</p>	<p>When two things are <b>MORE OR LESS THE SAME</b>, they are</p>
<p><b>THINGS THAT MOVE AGAINST EACH OTHER</b> create</p>	<p><b>FRICTION</b> is created by</p>
<p>A <b>DUG-OUT PLACE</b> is called a</p>	<p>A <b>GOUGE</b> is a</p>
<p><b>REMNANTS</b> are</p>	<p><b>THINGS THAT ARE LEFT BEHIND</b> are called</p>

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A **LONG, RAISED AREA**  
is known as a

FOLD

A **RIDGE** is a

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When something  
is **VAST**, it is

FOLD

Another word  
for **VERY LARGE** is

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FOLD

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FOLD

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FOLD

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FOLD