**Study Questions**

**to “Thunder on the Plains”**

Study and learn facts and ideas based on this Young Naturalists nonfiction story in *Minnesota Conservation Volunteer, September–October 2019, 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, pimpleback, 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!**
1. Name four animals that once lived, but no longer live, alongside bison.

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______________________________________________________________________
______________________________________________________________________

2. In what century did bison almost become extinct?
   a. 17th
   b. 18th
   c. 19th
   d. 20th

3. Bison are in the same family as cattle, sheep, and goats. List six traits these four kinds of animals have in common.

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4. How did thick fur and wide horns help ancient bison survive?

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______________________________________________________________________

5. What do wild bison mainly eat?
   a. grasses and sedges
   b. mammoths and ground sloths
   c. hay
   d. trees and shrubs
6. What is rumination? ________________________________________________________

7. Why do bison roll on the ground? __________________________________________

8. Name three ways in which bison help keep the prairie healthy. 
______________________________________________________________________
______________________________________________________________________

9. List the season (spring, summer, fall, winter) for each event or activity:
Bison rub against trees and rocks to peel off their itchy fur.
Bison mate.
Bison grow fatter and put on extra layers of fur.
Bison move less than in other seasons.
Bison calves are born.
Bison calves sprout horns and a hump.
Male bison fight over females.
Bison begin looking for each other.

10. Put these events in order from oldest to newest:
The last wild bison was seen in southwestern Minnesota
A small group of people worked to save America’s wild bison
The last ice age ended
There were tens of millions of bison in North America
William T. Hornaday found bison were almost gone
Native people obtained horses and guns from Spanish settlers
Bison first moved into North America
Blue Mounds State Park received several bison

11. Why did bison almost become extinct?
a. Horses and guns allowed people to kill more bison than they could with spears and arrows.
b. Horses and cattle competed for grass and cattle made bison sick.
c. Settlers and railroads used their lands for other purposes.
d. People were allowed to shoot as many bison as they wanted.
e. All of the above.
12. The title of this story is “Thunder on the Plains.” What “thunder” does this refer to?

a. Thunder from the rainstorms that provide water for wallows.
b. The sound of hoofbeats as bison stampede across the grasslands.
c. The sound a bison’s stomach makes as it digests tough grasses.
d. The sound of hunters shooting bison.

Challenge: Tallgrass prairie once covered some 18 million acres of Minnesota, one-third of the state. About how many acres total is Minnesota? ________________________________

______________________________
1. Why did Native American people stop hunting bison? 
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________________________________________________________________________

2. Why does a bison have a hump on its back? 
________________________________________________________________________

3. Name three kinds of grasses and sedges bison are likely to find in tallgrass prairie. 
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________________________________________________________________________

4. Why did Native American people hunt bison? 
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5. What “lessons for the future” does the story of the bison carry? 
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5. True or False: Only adult male bison have horns.
<table>
<thead>
<tr>
<th>If you are <strong>agile</strong>, you are</th>
<th>If you are <strong>able to move quickly and easily</strong>, you are</th>
</tr>
</thead>
<tbody>
<tr>
<td>A disguise that helps an object blend in with its background is called</td>
<td><strong>Camouflage</strong> is</td>
</tr>
<tr>
<td>When we <strong>conserve something</strong>, we</td>
<td>When we <strong>protect something for a long time</strong>, we</td>
</tr>
<tr>
<td>An animal that <strong>eat plants</strong> is</td>
<td><strong>A grazer</strong> is</td>
</tr>
<tr>
<td>A <strong>massive</strong> object is an object that is</td>
<td>A <strong>huge and heavy</strong> object is</td>
</tr>
</tbody>
</table>
Something that meets a living thing’s needs is

A resource is

A person who preserves animal parts for display or study is known as

A taxidermist is

Tendons are

Ropelike structures inside the body that connect muscles with body parts are known as