

STUDY QUESTIONS

TO “ON PINS AND NEEDLES”

Study and learn facts and ideas based on this Young Naturalists nonfiction story in *Minnesota Conservation Volunteer*, July-August 2024, www.mndnr.gov/mcvmagazine.

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!

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- 1. WHERE IS MINNESOTA'S "CACTUS COUNTRY"?**
- 2. NAME THREE WAYS CACTI ARE ADAPTED TO LIVING IN WARM AND DRY CLIMATES.**
- 3. TRUE OR FALSE: BECAUSE THEY LIVE IN SUCH HOT, DRY, AND HARSH CONDITIONS, CACTI DO NOT MAKE THEIR OWN FOOD THROUGH PHOTOSYNTHESIS.**
- 4. WHICH OF THE FOLLOWING FACTORS HAS NOT SHAPED WHERE CACTI GROW IN MINNESOTA?:**
 - GLACIATION FOLLOWED BY NEW SOIL FORMATION
 - CLIMATE (HOT AND DRY IN SUMMER, THEN COLD AND DRY IN WINTER)
 - ROCKY LANDSCAPE THAT PREVENTS OTHER PLANTS FROM TAKING OVER
 - MINERAL DEPOSITS FROM ANCIENT LAVA FLOWS
- 5. TRUE OR FALSE: CACTI IN MINNESOTA ONLY GROW IN PROTECTED AREAS ON PUBLIC LANDS, LIKE IN STATE PARKS OR NATIONAL WILDLIFE REFUGES.**
- 6. MINNESOTA CACTI DO WELL IN PLACES WHERE IT IS HOT AND DRY IN SUMMER, THEN COLD AND DRY IN WINTER. WHICH OF THE FOLLOWING ALSO DOES WELL IN THOSE CONDITIONS?**
 - FORESTS
 - PRAIRIES
 - MOSS

D. MUSHROOMS

7. WHICH OF THE THREE SPECIES FEATURED IN THE STORY LIKELY INSPIRED THE TITLE OF THE STORY, "ON PINS AND NEEDLES?"

8. WHAT ARE TWO REASONS WHY ROCKY OUTCROPS ARE GOOD HABITATS FOR CACTI?

9. OF THE THREE SPECIES OF CACTI IN MINNESOTA, WHICH IS MOST COMMON?

- A. PLAINS PRICKLY PEAR CACTUS
- B. BALL CACTUS
- C. BRITTLE PRICKLY PEAR CACTUS
- D. BARREL CACTUS

10. TRUE OR FALSE: WITH PROPER CARE AND GOOD HABITAT, THE BALL CACTUS GROWS QUITE QUICKLY.

11. CHALLENGE QUESTION: MATCH THE PARK WITH THE FEATURE THE STORY SAYS YOU CAN FIND THERE.

MINNESOTA COMPREHENSIVE ASSESSMENTS PRACTICE ITEMS

1. COMPARE AND CONTRAST THE PLAINS PRICKLY PEAR AND THE BRITTLE PRICKLY PEAR (ONE SIMILARITY AND ONE DIFFERENCE).

2. "ON PINS AND NEEDLES" IS AN EXAMPLE OF WHAT TYPE OF WRITING?

- A. FABLE
- B. LEGEND
- C. HISTORICAL FICTION
- D. NON-FICTION

3. BASED ON THE STORY DETAILS, WHAT DO YOU PREDICT THE AUTHOR WILL MOST LIKELY DO NOW THAT SHE HAD AN OPPORTUNITY TO VISIT THE GREENHOUSE AT THE MINNESOTA LANDSCAPE ARBORETUM?

- A. PLANT CACTI IN HER OWN GARDEN
- B. VISIT OTHER STATE PARKS AND WILDLIFE REFUGES.
- C. TELL OTHER PEOPLE ABOUT WHAT SHE LEARNED ABOUT CACTI.

D. DONATE MONEY TO HELP ENDANGERED CACTI.

4. 1. FROM WHAT POINT OF VIEW IS “ON PINS AND NEEDLES” WRITTEN?

- A. FIRST PERSON
- B. THIRD PERSON
- C. REALISTIC FICTION
- D. ALL OF THE ABOVE

5. WHAT CAN WE INFER ABOUT THE AUTHOR FROM READING “ON PINS AND NEEDLES?”

- A. SHE HAS STUDIED A LOT ABOUT GEOLOGY AND GLACIERS.
- B. SHE APPRECIATES NATURE.
- C. SHE HAS A GREEN THUMB.
- D. SHE WORKS AT A WILDLIFE REFUGE.

VOCABULARY

Succulent – a plant that can store water inside its body to survive in dry places

Seed bank – the storage of seeds for safe-keeping; a place where suitable conditions are maintained to conserve seed specimens of different plant species

Photosynthesis – the process where green plants convert sunlight into glucose, a sugary liquid that is the plant’s source of food.

Segment – a part of a whole

Transplant – to move or transfer (something such as a plant) to another place

Refuge - a place that protects rare species or unique natural areas.

Blaze - a very large or fiercely burning fire

Spine - a sharp, pointed projection (such as the needle-like projections from a cactus stem)