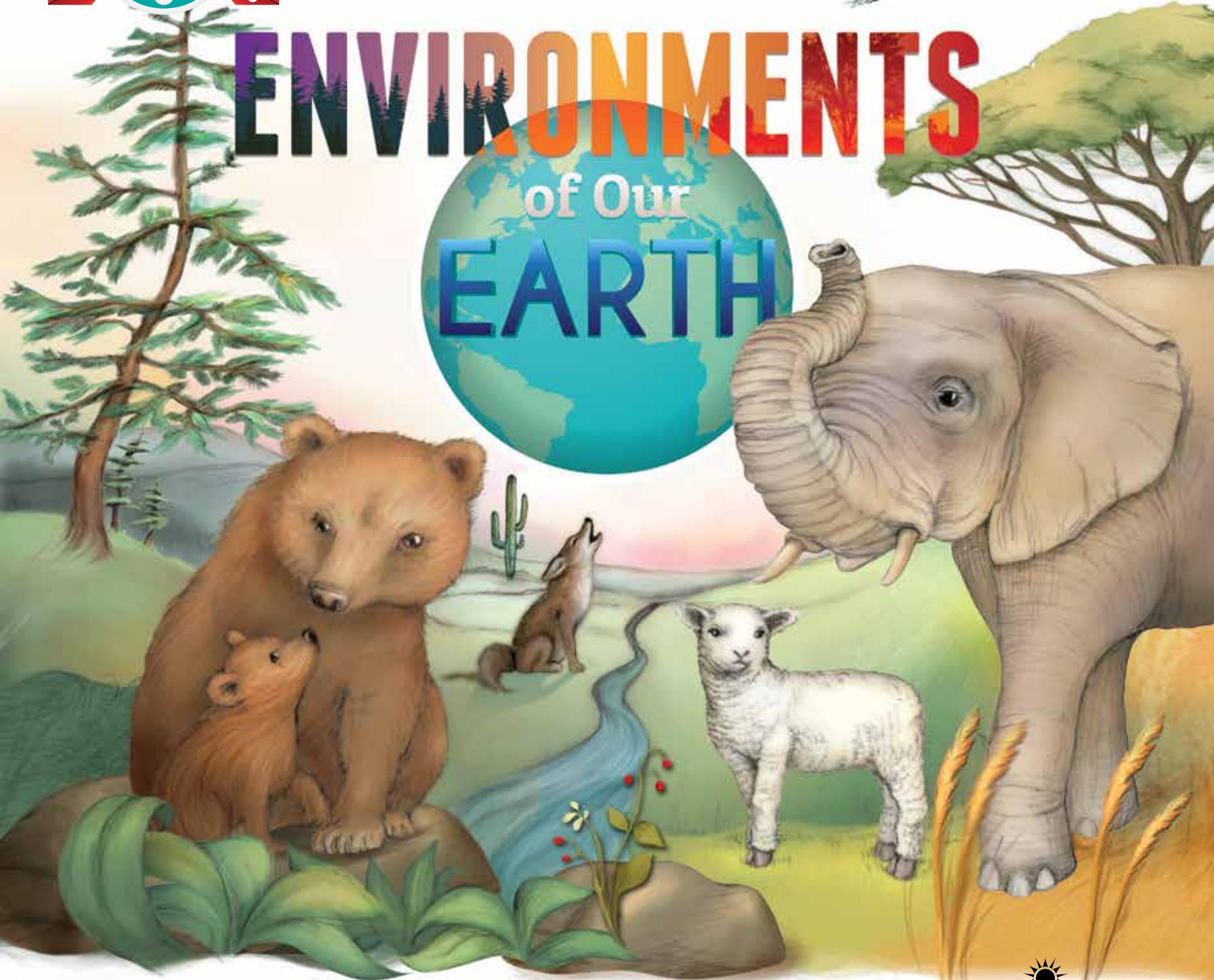
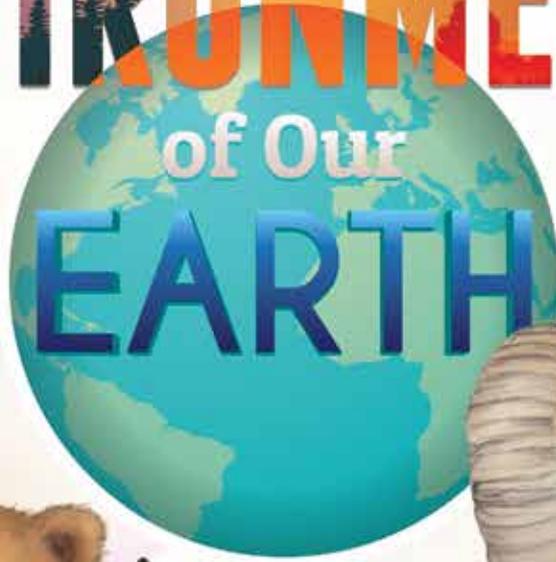




ENVIRONMENTS

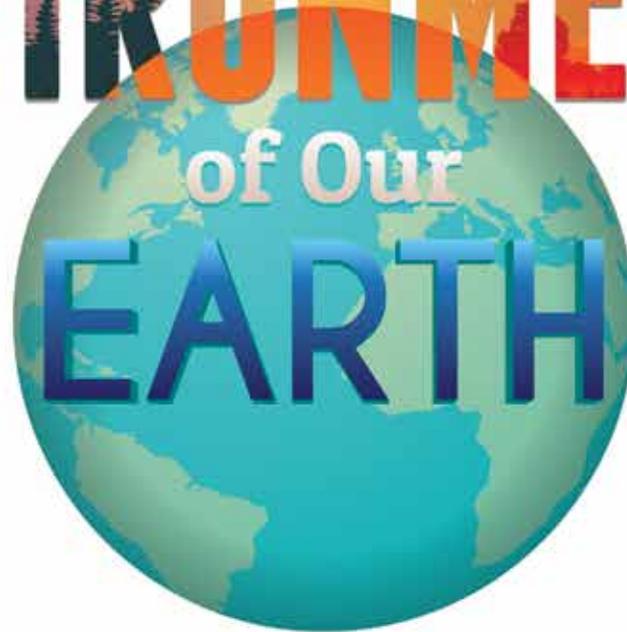


By **Lawrence F. Lowery**


National Science Teachers Association

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ENVIRONMENTS





ENVIRONMENTS of Our EARTH

By **Lawrence F. Lowery**

Illustrated by **Linda Olliver**





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Introduction

The *I Wonder Why* books are science books created specifically for young learners who are in their first years of school. The content for each book was chosen to be appropriate for youngsters who are beginning to construct knowledge of the world around them. These youngsters ask questions. They want to know about things. They are more curious than they will be when they are a decade older. Research shows that science is students' favorite subject when they enter school for the first time.

Science is both *what we know* and *how we come to know* it. What we know is the content knowledge that accumulates over time as scientists continue to explore the universe in which we live. How we come to know science is the set of thinking and reasoning processes we use to get answers to the questions and inquiries in which we are engaged.

Scientists learn by observing, comparing, and organizing the objects and ideas they are investigating. Children learn the same way. These thinking processes are among several inquiry behaviors that enable us to find out about our world and how it works. Observing, comparing, and organizing are fundamental to the more advanced thinking processes of relating, experimenting, and inferring.

The five books in this set of the *I Wonder Why* series focus on Earth science content. The materials of our Earth are mostly in the forms of solids (rocks and minerals), liquids (water), and gases (air). Inquiries about these materials are initiated by curiosity. When we don't know something about an area of interest, we try to understand it by asking questions and doing investigations. These five Earth science books are written from the learner's point of view: *How Does the Wind Blow?*; *Clouds, Rain, Clouds Again*; *Spenser*

and the Rocks; *Environments of Our Earth*; and *Up, Up in a Balloon*. Children inquire about pebbles and rocks, rain and wind, and jungles and deserts. Their curiosity leads them to ask questions about land forms, weather, and climate.

The information in these books leads the characters and the reader to discover how wind can be measured and how powerful it can be, how the water cycle works, that living things need water to survive, and that plants and animals have adapted to different climate-related environments. They also learn how people have learned to fly in the ocean of air that surrounds Earth.

Each book uses a different approach to take the reader through simple scientific information. One book is expository, providing factual information. Several are narratives that allow a story to unfold. Another provides a historical perspective that tells how we gradually learn science through experimentations over time. The combination of different artwork, literary perspectives, and scientific knowledge brings the content to the reader through several instructional avenues.

In addition, the content in these books correlates to criteria set forth by national standards. Often the content is woven into each book so that its presence is subtle but powerful. The science activities in the Parent/Teacher Handbook section in each book enable learners to carry out their own investigations that relate to the content of the book. The materials needed for these activities are easily obtained, and the activities have been tested with youngsters to be sure they are age appropriate.

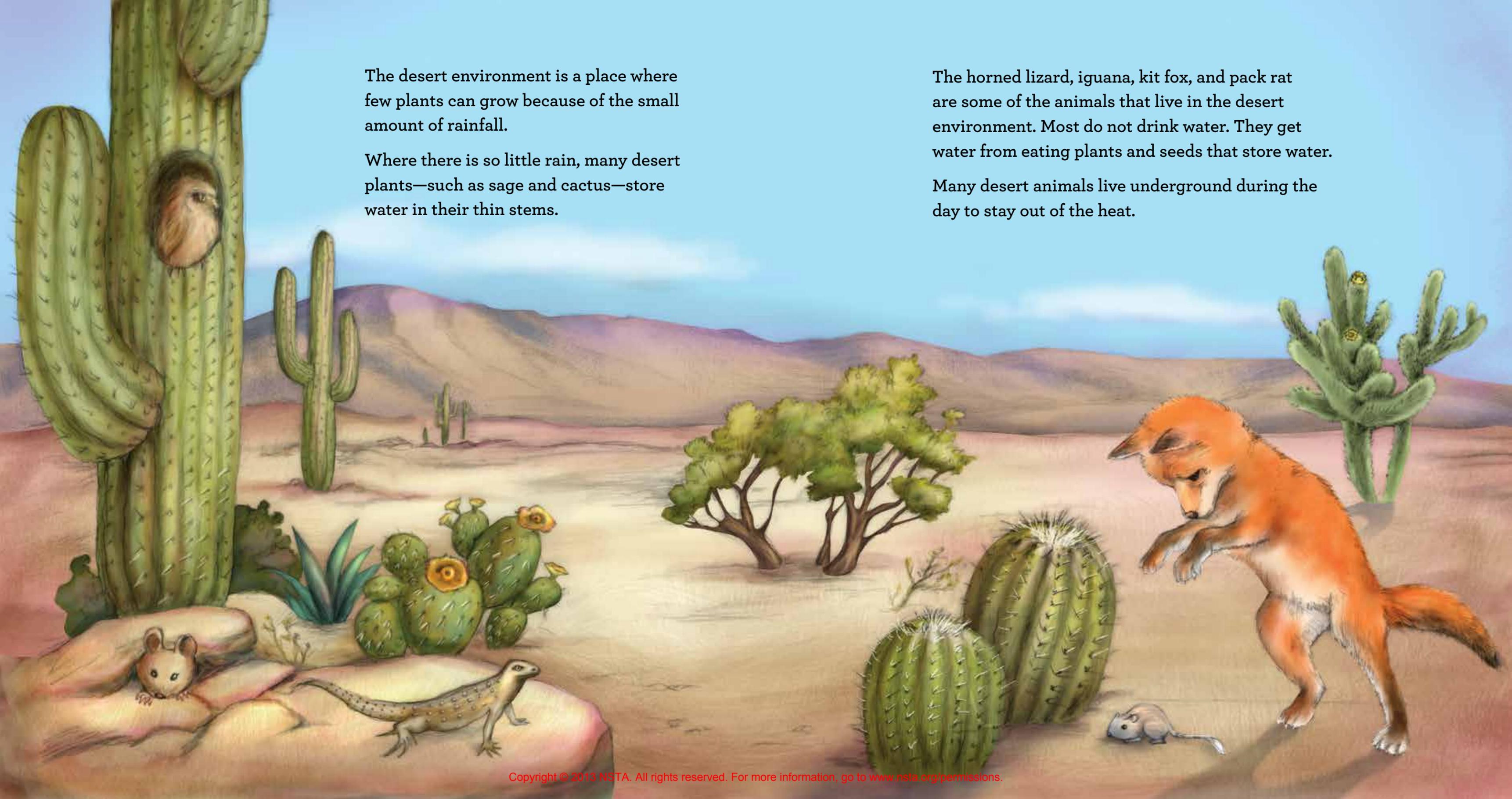
After students have completed a science activity, rereading or referring back to the book and talking about connections with the activity can be a deepening experience that stabilizes the learning as a long-term memory.

The desert environment is a place where few plants can grow because of the small amount of rainfall.

Where there is so little rain, many desert plants—such as sage and cactus—store water in their thin stems.

The horned lizard, iguana, kit fox, and pack rat are some of the animals that live in the desert environment. Most do not drink water. They get water from eating plants and seeds that store water.

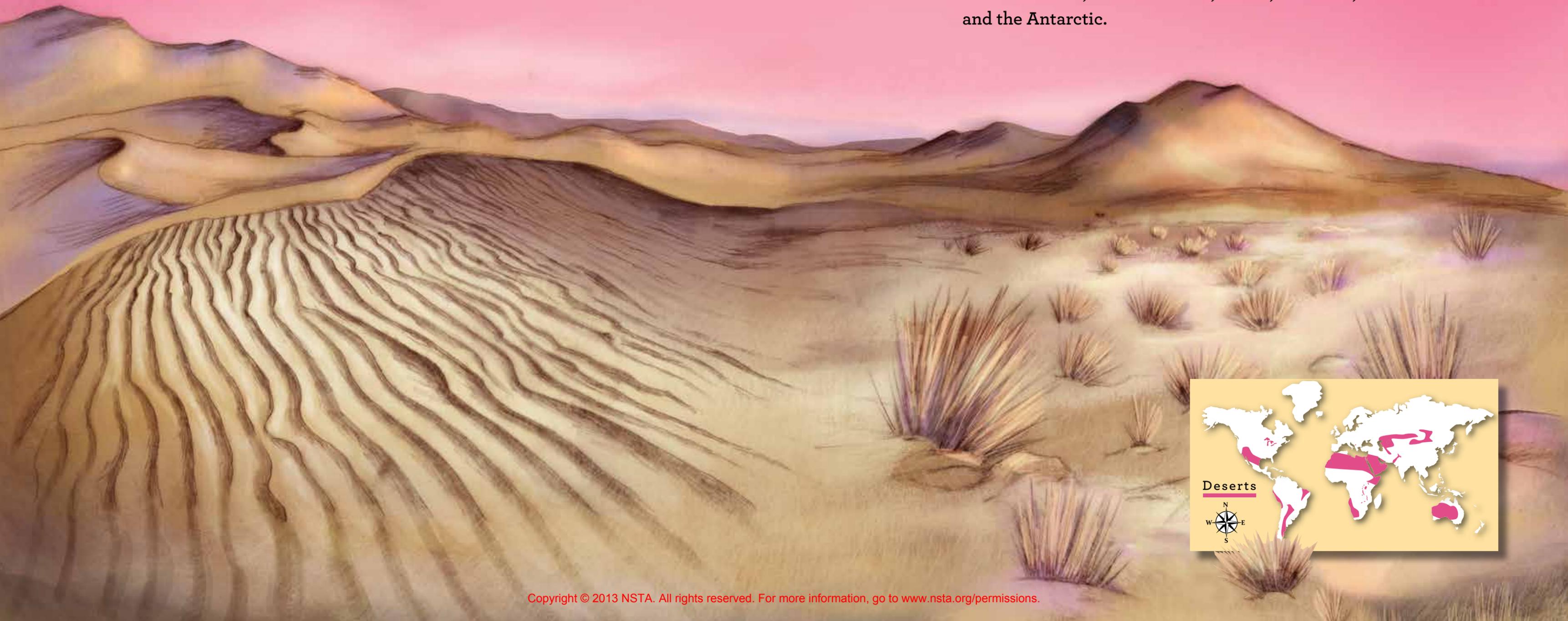
Many desert animals live underground during the day to stay out of the heat.



Some deserts are almost completely without water. On such deserts, winds sometimes blow the sand to create small hills or dunes.

One of the driest places on Earth is the Atacama Desert in Chile. It rains so little there that the rainfall usually cannot be measured.

On our Earth, very large deserts can be found in North America, South America, Africa, Australia, and the Antarctic.





ENVIRONMENTS of Our EARTH

Take a world tour between the covers of a book! *Environments of Our Earth* guides children through six types of regions that are shaped by rainfall—or the lack thereof. Readers start the journey in dense tropical rain forests and woodlands, travel through grassy savannas and prairies, and end with dry steppes and deserts. Throughout the book, attentive readers can compare how and why regions are alike and different. Readers will also discover fun facts about the wettest and driest places on Earth and the amazing effect rainfall has on plants, animals, and people.

Environments of Our Earth is part of the *I Wonder Why* book series, written to ignite the curiosity of children in grades K–6 while encouraging them to become avid readers. These books explore the marvels of geology, land forms, weather, environments, and other phenomena related to science and nature. Included in each volume is a Parent/Teacher Handbook with coordinating activities. The *I Wonder Why* series is written by an award-winning science educator and published by NSTA Kids, a division of NSTA Press.

Grades K–6

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