

WHY IS THE SONORAN DESERT SPECIAL? SEASONS OF SAGUARO

A story about a saguaro cactus and her desert neighbors that introduces Sonoran Desert ecology and plant/animal desert survival strategies.

ARIZONA SCIENCE STANDARDS

SC00-S4C3-01,
SC00-S4C3-02,
SC01-S4C3-03

OBJECTIVES

Students should:

- Identify the saguaro as a plant unique to the Sonoran Desert.
- Relate the basic life history of the saguaro with those of other common plants and animals of the Sonoran Desert.
- Understand the challenges heat and aridity pose to desert life.
- Observe strategies plants and animals take to preserve moisture and keep cool.

MATERIALS

- teacher's copy of *Seasons of Saguaro*
- copies for each student of *Seasons of Saguaro - Student Handout*

GETTING READY

Prepare the materials as listed in the left margin of this page.

DOING THE ACTIVITY

SETTING THE STAGE

- 1) Ask the students, "Do you know the name of our desert?" If they don't know it, tell them that the desert in which we live is called the Sonoran Desert.
- 2) Explain that like other deserts, the Sonoran Desert is dry. But it is special because much of it gets rain two times a year, in winter and summer. This helps a lot of animals and plants live here. The Sonoran Desert has more kinds of plants and animals than almost any other desert on earth! Some of them are found nowhere else. One of the special Sonoran Desert dwellers found nowhere else is the giant saguaro cactus.
- 3) Tell the students you are going to read a story about the saguaro and some of her desert friends, and that you need their help acting out the parts.

READING THE STORY

- 1) Position the students in a reading circle on the floor (seated) and begin reading the story. Act out the parts (*as noted in italics*) and have your students do the same.
- 2) After reading the story aloud, have them return to their chairs. Pass out student copies of *Seasons of Saguaro* to each child. Give them some time to color the drawings and read their story handouts.

DISCUSSION

Ask the group some reading comprehension and critical thinking questions about the story's content. Discuss the answers.

SUGGESTED QUESTIONS

1. Why is Saguaro important in the desert? (*food for many animals*)
2. Who eats her fruits? (*animals, people*)
3. When are the fruits ripe? (*summer*)
4. Why did Saguaro need a nurse tree when she was young? (*to shade her. The nurse tree also protects young saguaros from frost.*)
5. How did Saguaro make shade when she got older? (*her spines shaded her*)
6. What did Saguaro do after it rained? (*soaked up the water through her roots*)
7. What food does Coyote eat? (*rabbits, prickly pear fruits*)
8. What food does Kangaroo Rat eat? (*seeds*)
9. How does Javelina stay cool in summer? (*lies down in the shade*)
10. How does Kangaroo Rat stay cool? (*goes in her burrow*)
11. What do you think would happen if it did not rain for a whole year in the desert? (*many animals and plants would have a hard time getting water: Coyote's water hole might dry up, Saguaro would get very, very skinny, etc.*)
12. Why do you think Saguaro grew so slowly? (*there is not a lot of water in the desert, and it takes a long time to get that big without a lot of water*)
13. What differences do you see between day and night in the illustrations?

EXTENSION

Have the children write and illustrate their own story or draw a picture about a saguaro and all the animals and plants that interact with it.

SEASONS OF SAGUARO




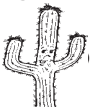
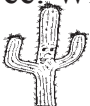






Once Saguaro was very small. (*Kids can kneel and curl forward, forming a tiny ball with their bodies.*) She began life as a tiny seed, where a bird dropped her at the foot of an ironwood tree. Saguaro grew slowly, safe in the shade of her nurse tree. (*Kids can uncurl bodies slowly, until they are kneeling, torsos erect.*) When she was 40 years old, Saguaro was shorter than you are! As she grew, Saguaro got to know her desert neighbors. (*Kids continue to kneel, ready to act out following behaviors.*) Coyote ran by, looking for rabbits and prickly pear fruit to eat. (*Put hand over eyes like shade visor, looking out.*) Javelina tromped by on his pointed hooves, munching prickly pear pads. (*munch, munch, munch*) Kangaroo Rat hopped around Saguaro at night, putting seeds in her cheek pouches to take back to her burrow under ground. (*Imitate, stuffing imaginary cheek pouches.*)











Rains fell in winter and summer. (*imitate by wiggling fingers or patting knees*) Saguaro drank up the rain with her roots. (*slurp*) She stored the water inside her stem, swelling to take it all in. (*puff out chest*) After many years, Saguaro grew taller than her nurse tree. (*stand up*) She still made some shade with her spines. She also grew arms. (*hold arms out*) In the spring, white flowers bloomed on the ends of her arms. (*wiggle fingers*) Bats and moths visited the flowers at night. (*imitate*) Bees and birds visited them in the day. (*imitate*) In the summer, the flowers turned into sweet, red fruits. (*close hands to represent fruits*) Saguaro's neighbors ate the fruits that fell. Birds flew up to eat them. And Desert People picked Saguaro's fruits with long poles.

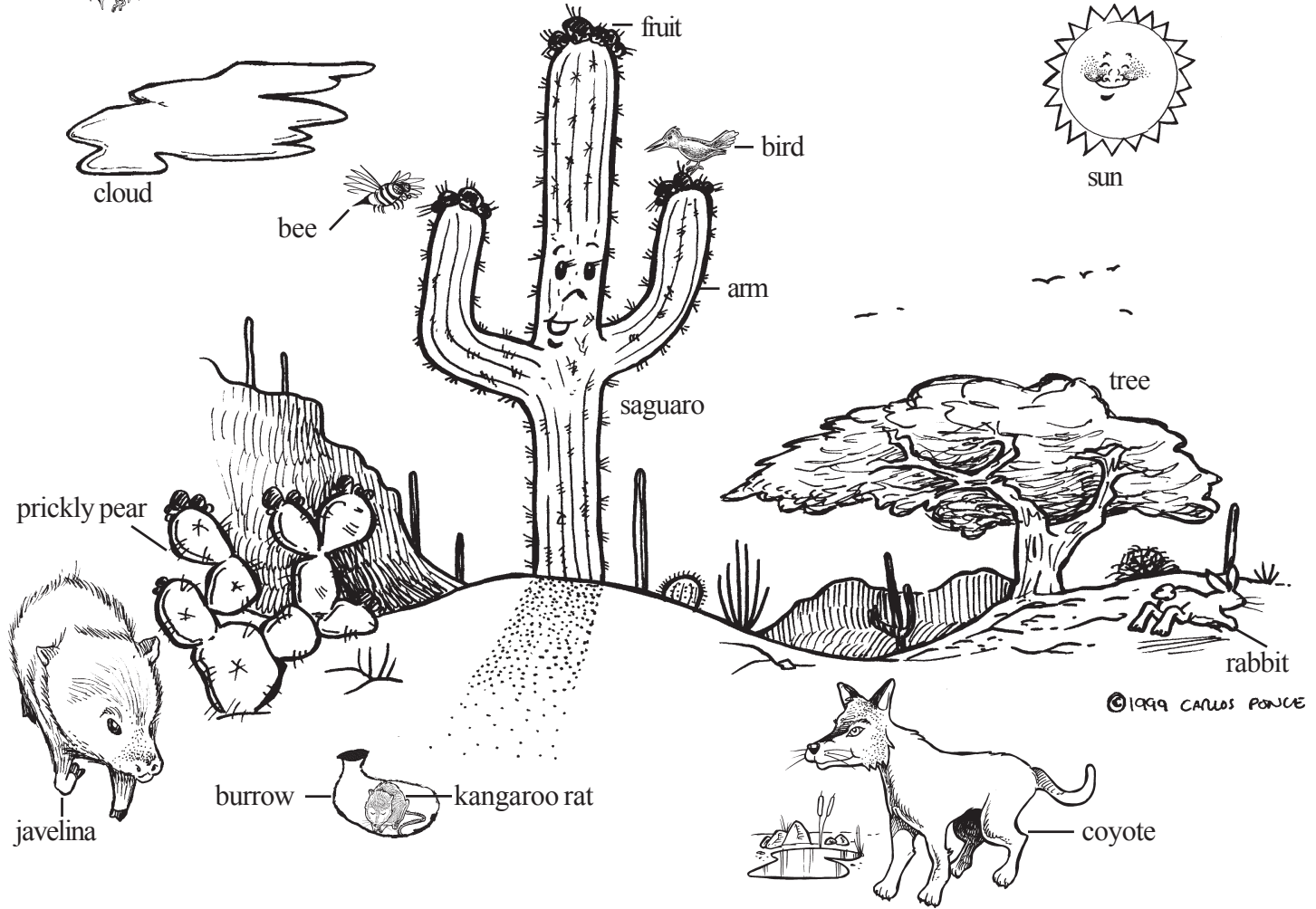
In the summer, Sun was very hot. Coyote got a drink at a small water hole. (*slurp*) Javelina rested in the shade of a mesquite tree. (*imitate, lying down*) Kangaroo Rat slept in her burrow where it was cooler. (*imitate, lying down curled up in a ball*)



But Saguaro could not go to the water hole for a drink. She could not lie down in the shade of the mesquite tree. She could not crawl into a cool den. She had to stand under the hot sun. She got thinner and thinner as she used the water inside her. Until one day, tall clouds formed above the mountains. (*hold hands above head in the shape of clouds*) Thunder boomed. (*boom!*) And cool rain burst down onto the desert. (*have the kids make rain as a class by snapping, clapping, or slapping their thighs alternately*) The summer monsoons had begun! Once again, Saguaro swelled as she drank up the rain with her roots. (*swell up chests*)


SEASONS OF SAGUARO

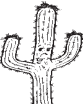



Once  was very small. She began life as a tiny seed, where a  dropped her at the foot of a . Saguaro grew slowly, safe in the shade of her nurse tree. When she was 40 years old,  was shorter than you are! As she grew,  got to know her desert neighbors.  ran by, looking for  and prickly pear fruit to eat.  tromped by on his pointed hooves, munching prickly pear pads.  hopped around  at night, putting seeds in her cheek pouches to take back to her  under ground.




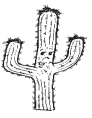
 fell in winter and summer.  drank up the  with her roots. She stored the water inside her stem, swelling to take it all in. After many years,  grew taller than her nurse tree. She still made some shade with her spines. She also grew s. In the spring, white s bloomed on the ends of her s. Moths and s visited the flowers at night. s and s visited them in the day. In the



summer, the  turned into sweet, red fruits. Saguaro's neighbors ate the fruits that fell.  s flew up to eat them. And Desert People picked Saguaro's fruits with long poles.

In the summer,  was very hot.  got a drink at a small water hole.  rested in the shade of a .  slept in her  where it was cooler.

But  could not go to the water hole for a drink. She could not lie down in the shade of the . She could not crawl into a cool . She had to stand under the hot . She got thinner and thinner as she used the water inside her.

Until one day, tall  formed above the mountains. Thunder boomed. And cool  burst down onto the desert. The summer  had begun! Once again,  swelled as she drank up the rain with her roots.

