



ARIZONA-SONORA
**DESERT
MUSEUM**

Saguaro Tales

A forty-five minute Desert Discovery Class

To the Teacher:

Thank you for making the *Saguaro Tales* Desert Discovery Class a part of your curriculum. During this exciting educational program, students will see live desert animals, handle artifacts, and perhaps serve as a volunteer for a program demonstration.

This packet contains pre- and post- program information and activities along with a vocabulary list and suggested resources. These materials were developed to help you extend this class topic with both introductory and follow-up lessons. The pre-visit information will introduce students to some of the basic concepts presented in *Saguaro Tales* and help prepare them for the class. We hope you'll find this information useful and easy to incorporate into your science curriculum. For more information about the Desert Museum and the Sonoran Desert, visit our website at www.desertmuseum.org.

We look forward to working with you and your students.

Sincerely,
ASDM Center for Sonoran Desert Studies
Education Department

CLASS OBJECTIVES

Through the examination of live animals, artifacts and interactive demonstrations students will:

- Identify the basic plant structures of the saguaro and describe their functions.
- Trace the life cycle of a saguaro.
- Identify adaptations of the saguaro that allow it to live in the Sonoran Desert environment.
- Describe relationships between the saguaro and other desert plants and animals.
- Discover how Native Americans have used the saguaro for thousands of years.

ARIZONA ACADEMIC STANDARDS IN SCIENCE CORRELATION

The Saguaro Tales program and supplemental activities correlate to these Arizona Academic Science Standards. See each activity for specific standards and performance objectives.

SC03-S4C3-04, SC03-S4C3-03, SC03-S4C2-02, SC03-S4C4-01, SC03-S4C2-02, SC03-S4C1-01, SC00-S6C3-02

Science Standards:

Strand 1: Inquiry Process

Concept 1: Observations, Questions, and Hypotheses

Concept 2: Scientific Testing

Concept 3: Analysis and Conclusions

Concept 4: Communication

Strand 2: History and Nature of Science

Concept 1: History of Science as a Human Endeavor

Concept 2: Nature of Scientific Knowledge

Strand 3: Science in Personal and Social Perspectives

Concept 1: Changes in Environment

Concept 2: Science and technology in Society

Concept 3: Human Population Characteristics

Strand 4: Life Science

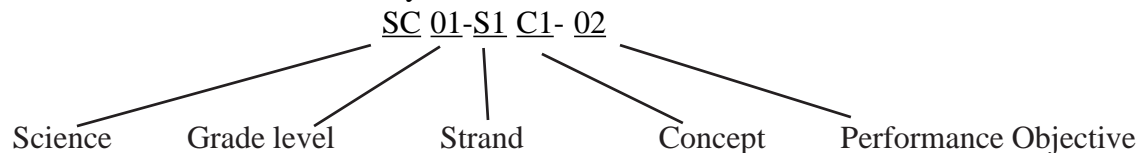
Concept 1: Characteristics of Organisms

Concept 2: Life Cycles

Concept 3: Organisms and Environments

Concept 4: Diversity, Adaptation and Behavior

The shorthand for each standard is read this way:



RESOURCES

Literature:

- Albert, Richard E. *Alejandro's Gift*. San Francisco: Chronicle Books, 1994.
- Arizona-Sonora Desert Museum. *A Natural History of the Sonoran Desert*. Tucson: ASDM Press, 1999.
- Bash, Barbara. *Desert Giant: the World of the Saguaro Cactus*. San Francisco: Sierra Club Books; Boston: Little, Brown, 1989.
- Cobb, Vicki. *This Place Is Dry: Arizona's Sonoran Desert*. New York: Walker, 1989.
- Dahl, Kevin. *Wild Foods of the Sonoran Desert*. Tucson: Arizona-Sonora Desert Museum Press, 1996.
- Guiberson, Brenda Z. *Cactus Hotel*. New York: H. Holt, 1991.
- Lazaroff, David. *ASDM Book of Answers* (Answers 42 most commonly asked questions by visitors.) Tucson: Arizona-Sonora Desert Museum Press, 1998.
- National Geographic Society. *Creatures of the Desert World Pop-Up*. Los Angeles: National Geographic Society, 1995.
- Storad, Conrad. *Saguaro Cactus*. Minneapolis, Minn.: Lerner Publications Co., 1994.
- Zoehfeld, Kathleen Weidner. *Cactus Café. A Story of the Sonoran Desert*. Norwalk, Ct: Soundprints, 1997.

Organizations:

- **Arizona-Sonora Desert Museum:** 2021 N. Kinney Rd., Tucson, AZ 85743. Phone: (520) 883-3025 www.desertmuseum.org
- **Desert USA:** www.desertusa.com

VOCABULARY

Adapt - To grow and change in response to environmental conditions.

Adaptation - Special body features or behaviors that help a creature survive in its environment (i.e. an eagle has sharp talons that help it grab and hold its prey.)

Ha:sañ - The Tohono O’odham word for the saguaro cactus.

Pollination - The spreading of pollen from the male parts of one flower to the female parts of another flower of the same kind, resulting in the production of seeds and fruits.

Pollinator - An animal that carries pollen from one plant to another of the same kind, performing pollination.

Protected - Legal status for conserving a species of plant or animal. It is illegal to collect or hunt protected plants and animals.

Saguaro - Giant columnar cactus found only in the Sonoran Desert.

Seedling - The plant that emerges from a seed at germination.

Spine - A sharp growth on a cactus derived from modified leaves.

PRE-PROGRAM INFORMATION AND ACTIVITIES

We recommend that students complete both Activities 1 and 2 before participating in the *Saguaro Tales* Discovery Class.

SAGUARO PARTS

Students identify the basic structures of a saguaro and their functions and label them on a picture of a saguaro.

LIFE CYCLE OF THE SAGUARO

Students make saguaro life cycle books to illustrate the growth and development of a saguaro from seed to death.

POST-PROGRAM INFORMATION AND ACTIVITIES

BUILT FOR THE DESERT

Students identify saguaro adaptations for desert life and transform an average potted plant into a desert-adapted saguaro.

WHO DEPENDS ON THE SAGUARO?

Students design a saguaro picture that depicts the cactus and some of the animals and plants that interact with it.

SAGUARO SEASONS

Compare the spectrum of seasons in our area with the “traditional” four seasons to illustrate the characteristics of the seasons in the region and the importance of the saguaro cactus within the annual cycle.

DESERT PEOPLE AND THE SAGUARO

Through stories and examination of a Tohono O’odham calendar, students explore the importance of the saguaro in the lives of native people in the Sonoran Desert.