



Prickly Cactuses

With spiny outsides and great abilities to store water and **thrive**, or do well, in hot, dry climates, the cactus has more to it than meets the eye. This week, The Mini Page takes a look at the world of cactuses.

Cactuses

Cactuses, sometimes called **cacti**, are a flowering plant family native to North and South America. Mexico has the most variety of cactuses, where the plants have adapted to its **arid**, or dry, climate.

In most species of cactus, the leaves are often modified to **spines**, or the needlelike points sticking out of the plants. The spines make it simpler for cactuses to store the water.

The root system of a cactus is often shallow and thin, so not much water is absorbed. However, what moisture a cactus does collect is stored within storage cells inside the stem. The stem also controls the **photosynthetic duties**, which is how plants use sunlight to get nutrients from carbon dioxide and water.

The ability of the cactus to store water

is crucial to its survival in climates where moisture, like rain, isn't readily available.

Succulents

Cactuses are considered **succulents**, which means they have thick and fleshy stems that are made for storing water. Succulents are **xerophytes** (ZEER-a-fites), which is a big word that means they need very little water to survive.

Succulents need between 10 and 14 hours of sunlight per day. The light a cactus absorbs is used to help the plant produce energy and food.

Cactus wren

Some animals in the desert depend on cactuses and their ability to adapt for their survival. The **prickly pear cactus** is a source of food for animals and insects.

The **cactus wren** is a type of bird that makes its nest in cactuses because of the protection they provide with their spines. Cactus wrens build their nests 3 to 10 feet above the ground on cactuses as another way to avoid predators.

Mini Fact:

There are about 2,000 types of cactuses in the world.

Saguaro cactus

A **saguaro** (suh-WAHR-oh) is a treelike type of cactus with white flowers that bloom in the spring and red fruit in the summer. Saguaros are native to the Sonoran Desert in the southwestern United States and Northern Mexico. They can grow up to 40 feet tall, and they can have up to 25 "arms."

Given the right conditions, a saguaro can live to be 200 years old, but they grow very slowly. A 10-year-old saguaro might be just 1.5 inches tall. A grown saguaro cactus can absorb and store up to 200 gallons of water during a heavy rain!

Saguaros are the largest cactus species in the U.S. A fully grown saguaro cactus can weigh more than 2,000 pounds.

People sometimes boil saguaro pulp to make syrup used for jams and jellies. The seeds from the fruit of the saguaro can be dried and ground into flour.

To Native Americans, the saguaro is a symbol of standing tall, providing nourishment and shelter to others, and being able to adapt to surroundings.

Resources

On the Web:

- bit.ly/MPCactus
- kids.kiddle.co/Cactus

At the library:

- "Cactus Hotel" by Brenda Z. Guiberson



Try 'n' Find

Words that remind us of cactuses are hidden in this puzzle. Some words are hidden backward or diagonally, and some letters are used twice. See if you can find:

CACTUS, DESERT,
FLOWERS, FOOD,
FRUIT, NEST, PRICKLY,
PULP, ROOTS,
SAGUARO, SEEDS,
SPINES, STEM,
STORAGE, SUNLIGHT,
THRIVE, WATER, WREN.

S V L Z P L U P D R E T A W N
R Y O R A U G A S L W S U S E
E L Z S U N L I G H T X M C R
W K S P I N E S T N K E A E W
O C K R L T K R P I T C F C R
L I R F H S E E D S T S V O R
F R C R Q S A C P U E C O Y T
F P I F E R O B S F D T R D I
T V Y D T I U R F T S E N O Z
E V D O O F Z V S T O R A G E



Cook's Corner

Cheese Tea Biscuits

You'll need:

- 2 cups sharp cheddar cheese, grated
- 2 cups flour
- 2 cups rice cereal

- 2 sticks butter, softened
- 1/2 teaspoon red pepper

What to do:

1. Mix all ingredients in a bowl.
 2. Make into a roll about 2 to 3 inches thick.
 3. Cover with plastic or aluminum wrap.
 4. Place roll in refrigerator until it becomes hard and easier to handle.
 5. Slice into thin tea biscuits and place on an ungreased cookie sheet.
 6. Bake in a preheated 350-degree oven for about 10 minutes.
- Do not cook until brown or they will be overdone. Makes about 36.



* You'll need an adult's help with this recipe.

ROOTONYM®

by Jan & Carey Orr Cook



Study the definition. When you know the missing word, fill in the letter boxes and the sentence blanks.

Answers: Plant, Dry, Shape, Desert.

1. A living thing like moss, ferns, grasses and trees (5-letter noun)

□ □ □ □ □

2. Not wet; not moist; without liquid or rain (3-letter adjective)

□ □ □

3. The outward look, form or outline of something (5-letter noun)

□ □ □ □ □

4. A dry land or region with little rainfall (6-letter noun)

□ □ □ □ □ □

1. Robert planned to give water to the green _____.
2. After swimming, Tom used a _____ towel to wipe off.
3. The cactus had a round _____ with spines everywhere.
4. Polly knows that a _____ is usually hot and sandy.

Mini Jokes

Callie: What did the happy cactus say to the grumpy cactus?

Cameron: "Don't be so prickly!"



Eco Note

New research says the movement of ocean water within a tsunami generates its own magnetic field ahead of the big changes in sea level, which could possibly lead to better warnings of the hazardous waves. Using magnetic and sea level change data from tsunamis that hit Samoa in 2009 and Chile in 2010, the study authors found that the tsunami-generated magnetic fields are so clearly evident that a wave height of only a few centimeters can be detected.

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For later:

Look in your newspaper for articles about plants.

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