

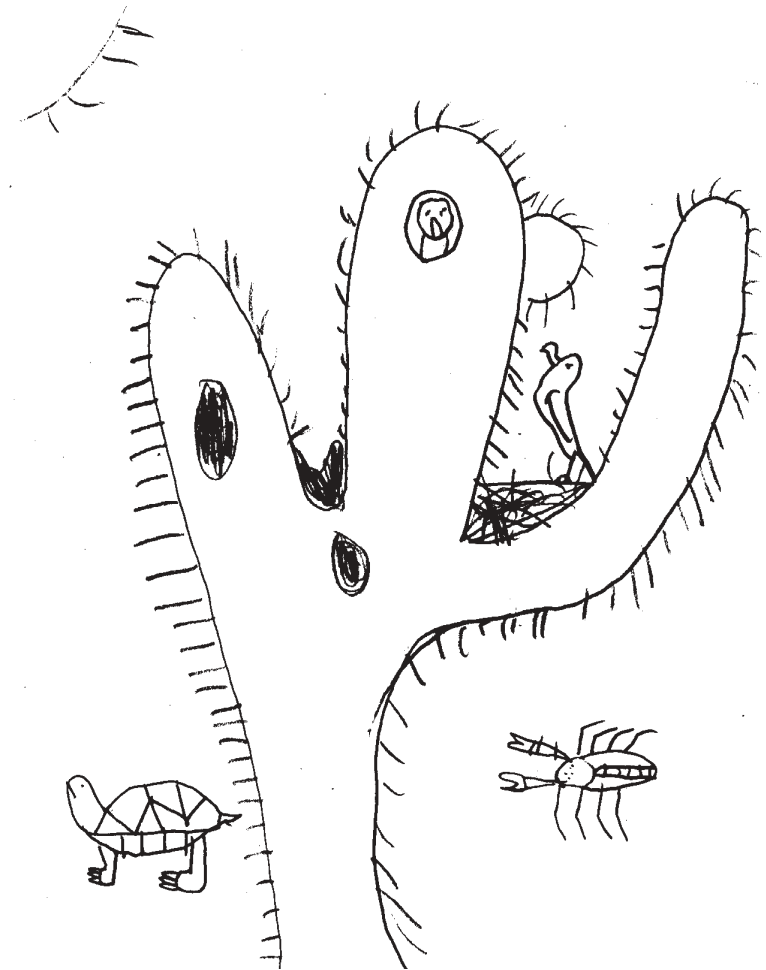


Tohono Chul Park's  
**Desert Pathfinders**  
*activities for children*

"Desert Pathfinders" was the recipient of the  
Museum Association of Arizona's  
1997 Award of Excellence

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**Tucson, Arizona 85704**  
**520-742-6455**  
**[www.tohonochulpark.org](http://www.tohonochulpark.org)**

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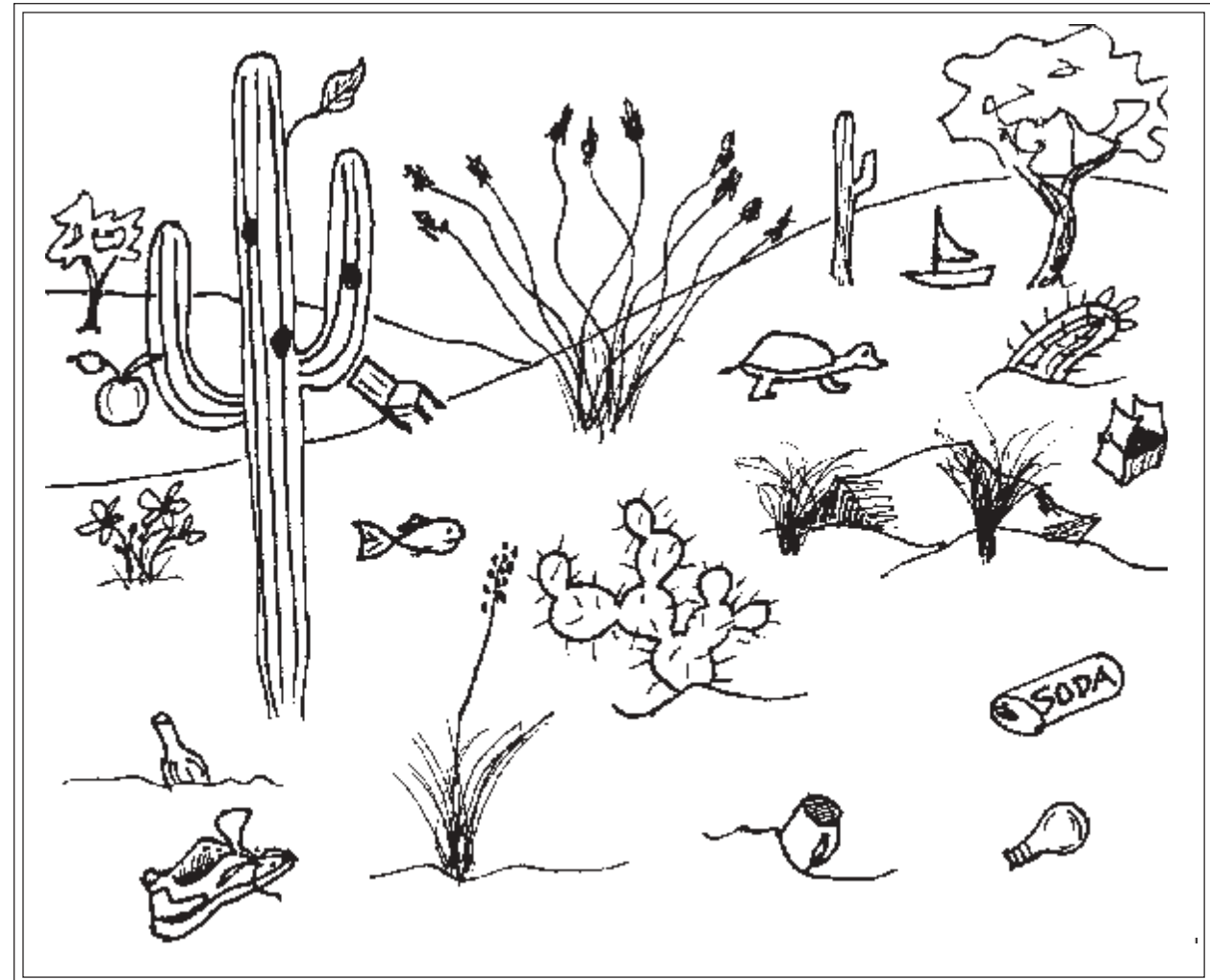
# DESERT NOTES



## Welcome to Tohono Chul Park

A "Corner" of the Sonoran Desert

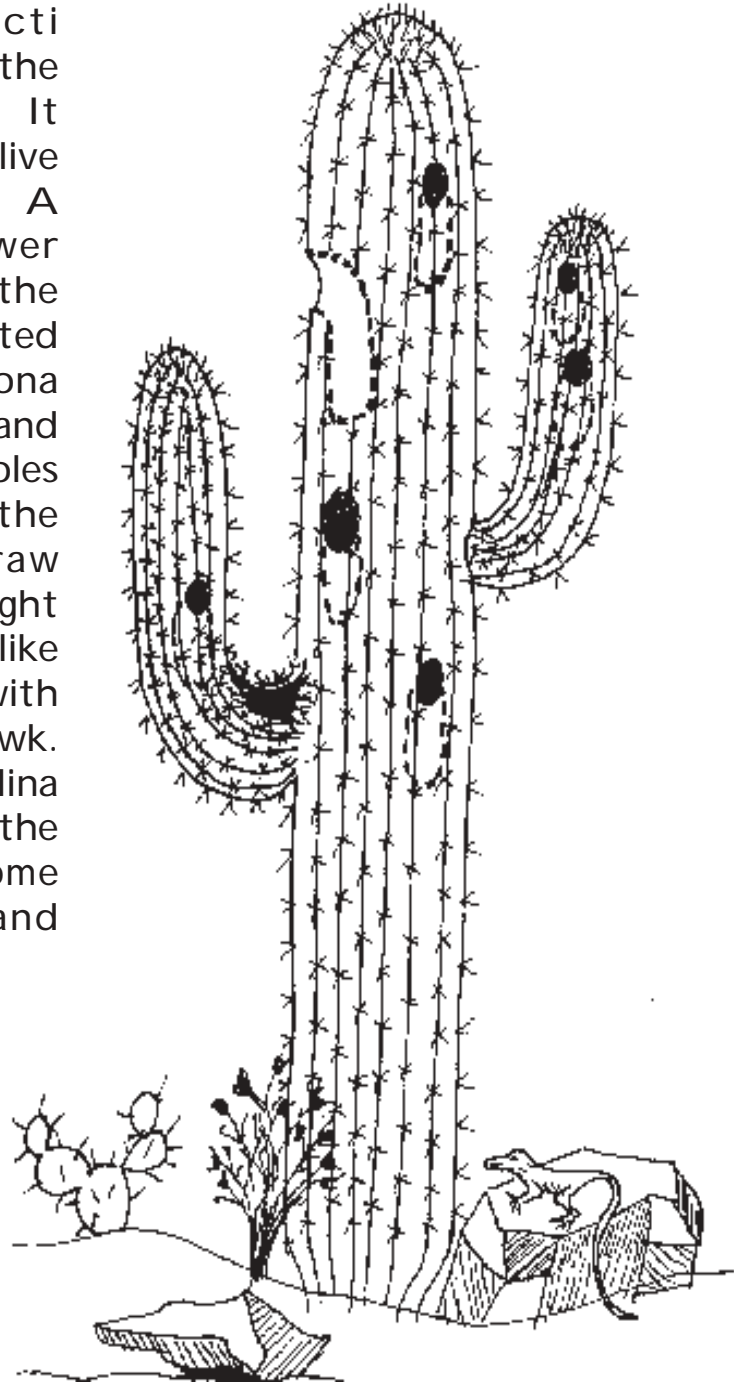
A desert is a land that is very dry and receives little rain. The Sonoran Desert can get very hot in the summer and quite cold in the winter. Plants and animals that live here must have ways to save water and stay cool. This is called adaptation. Below is a picture of the desert. Put an "X" through the things that don't belong in the desert -- that are not adapted. Then, draw yourself enjoying Tohono Chul!



with special thanks to Tohono Chul Park Docents  
Roberta Sawin and Barb Pepper -- activities  
Bill Keck -- illustrations

# SAGUARO - A Cactus Giant

One of the largest cacti (more than one cactus) is the saguaro (say - suh-war-o). It grows very slowly and can live to be over 200 years old. A large, white, waxy flower blooms on the ends of the arms in May. It is pollinated by bats and is the Arizona state flower. Many birds and other animals live in the holes made in the cactus by the Gila Woodpecker. Draw some of the birds that might live in this "cactus condo" like a woodpecker or elf owl (with their eggs) or a Harris hawk. You could even add a javelina looking for fallen fruit on the ground. Try adding some flowers to the plant and maybe a bat or two.

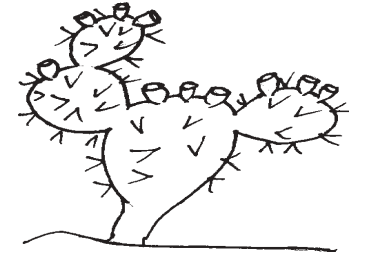


# EATING THE DESERT

The people of long ago found many plants in the desert they could eat -- fruits, seeds, flower buds, cactus stems, seed pods, etc. You can also enjoy these "fruits of the desert," but have an adult help you when make these recipes at home.

## Prickly Pear Jelly

- 2 1/2 cups prickly pear juice
- 3 Tablespoons lemon juice
- 1 box powdered pectin
- 3 1/2 cups sugar

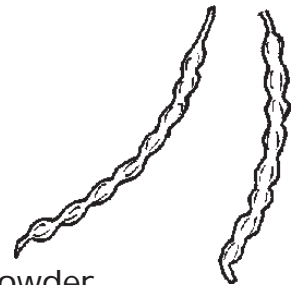


Bring prickly pear juice and pectin to a rapid boil, stirring. Stir in sugar and lemon juice. Continue stirring until mixture comes to a boil that cannot be stirred down. Boil for 3-4 minutes. Remove from heat, skim and pour into sterilized jars. Seal at once with melted paraffin. To juice ripe prickly pear fruits ("tunas") wash the fruit and use an old tooth brush to remove as many spines as possible. Freeze at least overnight and then thaw in colander triple-lined with cheesecloth. Softened fruit will be easy to juice with a potato masher. Always strain juice a second time through additional cheese cloth. Juice can be frozen in small freezer bags for later use. Great in fruit punches and sorbets. Always add a couple of unripe fruit to your juice for jelly. This adds natural pectin and helps your batch to "jell."

## Sonoran Cookies

- 1 cup butter or margarine
- 1 cup sugar
- 1 egg
- 2 Tablespoons vanilla

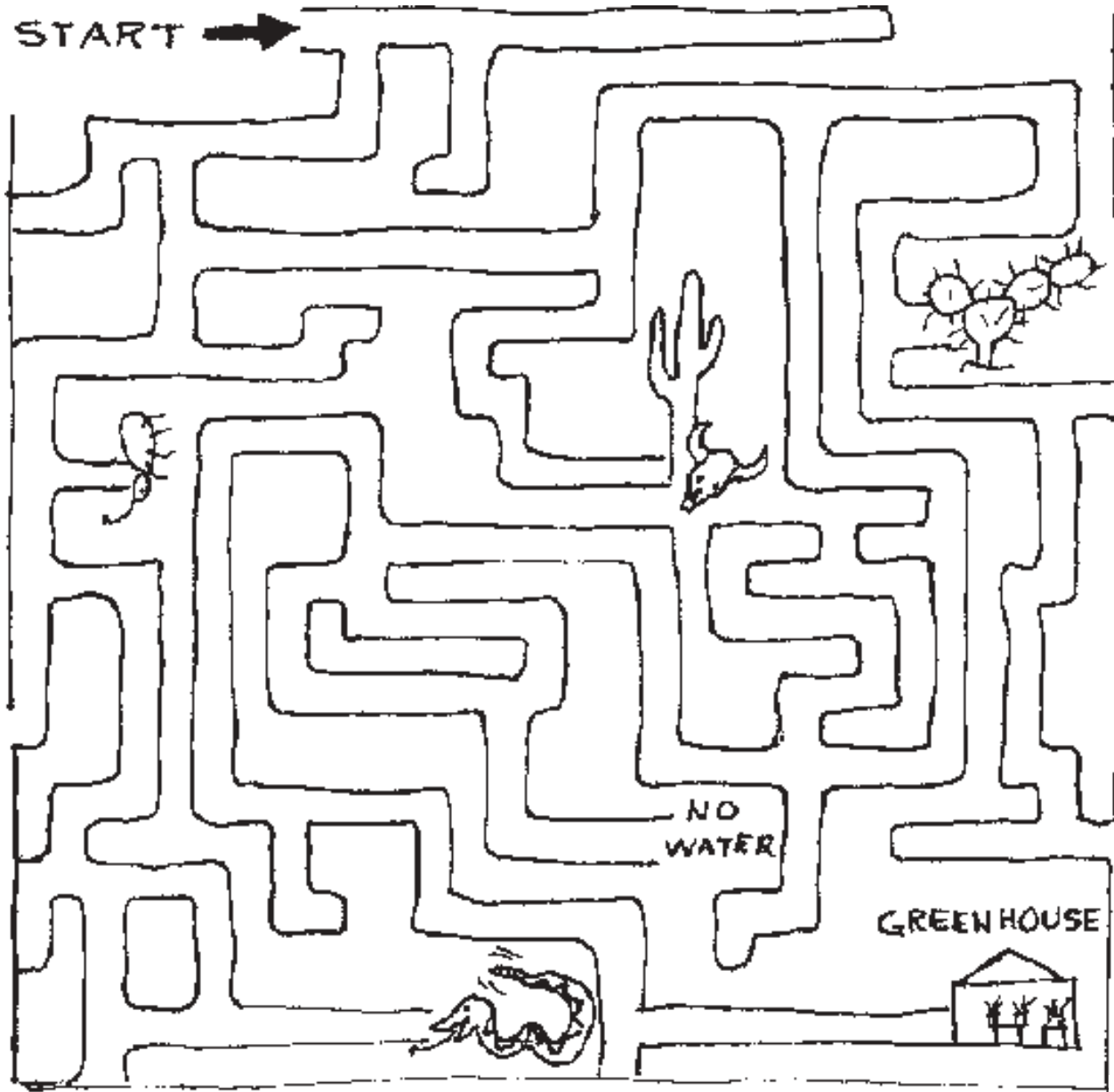
- 1 cup mesquite flour
- 2 cups masa harina
- 2 teaspoons baking powder
- 2 teaspoons baking soda



Cream softened butter and add sugar, egg and vanilla. Blend well. Sift dry ingredients and add to first mixture. Beat until smooth. Roll into 1" balls, place on cookie sheet and flatten with the bottom of a j





## CAN YOU FIND THE GREENHOUSE?

A group of students is trying to find the Greenhouse at Tohono Chul Park. They are going to make a cactus dish garden and need to buy a pot and some small cacti. Can you help them find the way?



## SEEDS

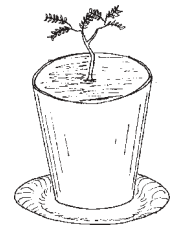
Cacti and other desert plants grow from seeds. Seeds can be found inside fruit, pods or fuzzy heads. They are new plants that have not started to grow yet. They might travel to a good place to grow by

blowing in the wind,   
attaching to an animal's fur,   
being eaten by a bird or   
just falling to the ground. 

Try to find seeds of each kind as you walk through the Park. Which seed do you think has found the best way to travel?

## GROW YOUR OWN MESQUITE TREE

1. Gather the following materials:
  - a mesquite pod
  - sand paper
  - a styrofoam cup and a paper plate
  - desert soil
2. Poke a hole in the bottom of the cup with a pencil. Fill the cup with desert soil.
3. Break open the mesquite pod and remove one seed. Rub the seed on the sand paper to break the hard outer coat. Make a hole in the soil about 1/2 inch deep, drop in a seed and cover it with soil.
4. Water the seed gently until you see water coming out the hole in the bottom of the cup. Set your cup on the paper plate and put it in a warm place. Keep the soil moist and watch for your mesquite tree to sprout. When it does, put it in a sunny spot to grow!



# CACTI OF THE DESERT

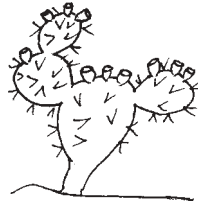
There are many different kinds, shapes and sizes of cacti in the desert. A cactus is a plant without any leaves, but it has a juicy, green stem and a woody inner skeleton. Cacti also have sharp spines on them. Do you guess why? Can you find these cacti?



*hedgehog*



*barrel*



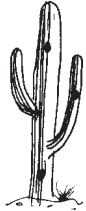
*prickly pear*



*cholla*

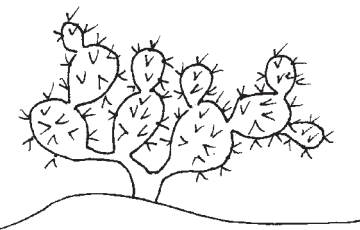
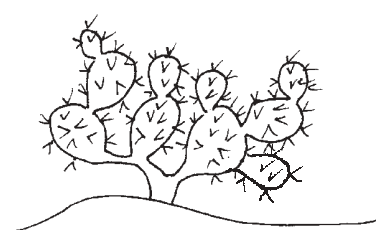
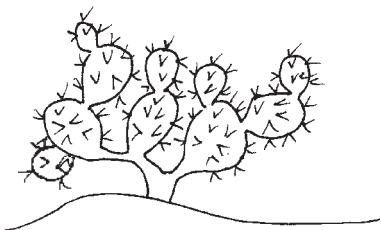
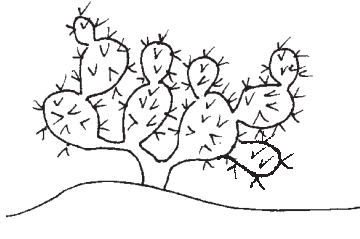
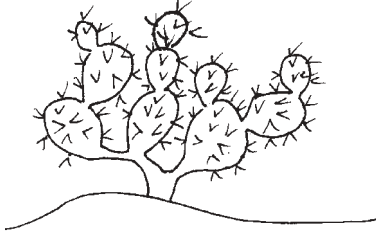
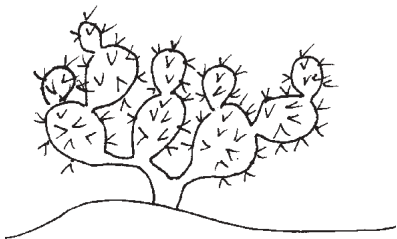


*pincushion*



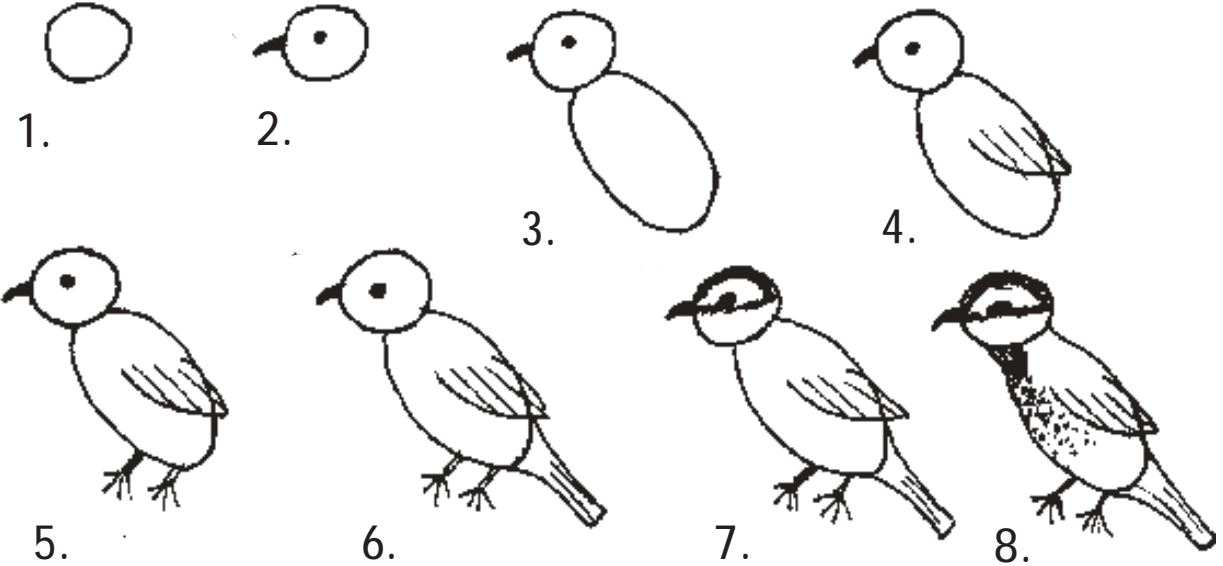
*saguaro*

Prickly pear cacti might all look alike, but up close there are many differences. Help us find the two prickly pear cacti that are exactly alike. Color only those two.



# DRAW A CACTUS WREN

The cactus wren is Arizona's state bird. It is large for a wren and is a busy, curious bird with a scratchy sort of song. Follow the directions below and you can learn to draw a cactus wren yourself.



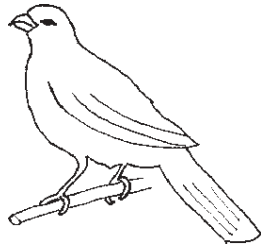
# SCARE-HAWKS!

Have you ever had a bird fly into a window at your house and hurt itself? You can help prevent this by making a scare-hawk to put on the window. On a piece of black paper, copy the hawk silhouette below, enlarging it as you go. Cut it out carefully. Tape it near the center of your window. Smaller birds will see this and be "scared" away from the glass.

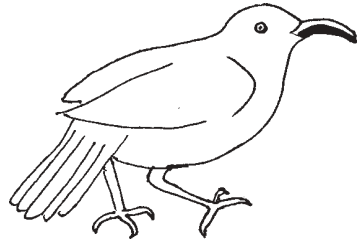


## BIRDS, BIRDS, BIRDS!

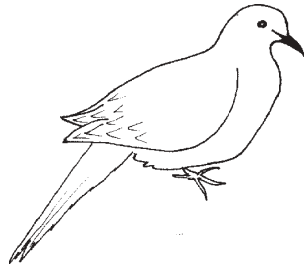
There are many kinds of birds at Tohono Chul Park. Many build nests and raise their families here. As you walk around the Park see how many of these birds you can identify from the pictures. You can also use the colored bird tiles in the Demonstration Gardens to help you. Watch for them. You will see more birds if you are quiet! Put a check (✓) in the box when you spot each one.



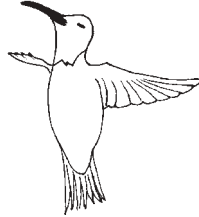
house finch



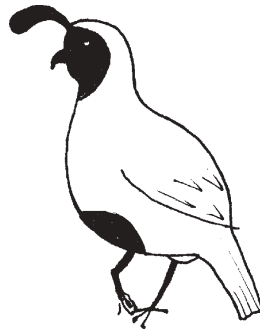
curve-billed thrasher



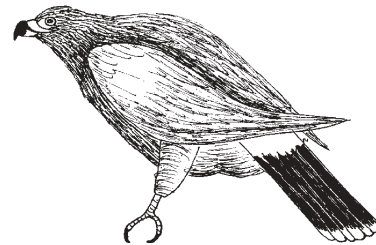
mourning dove



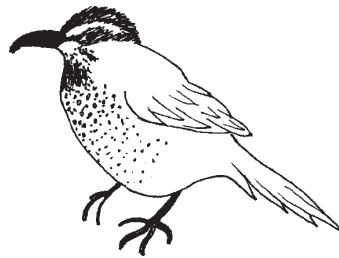
Anna's hummingbird



Gambel's quail



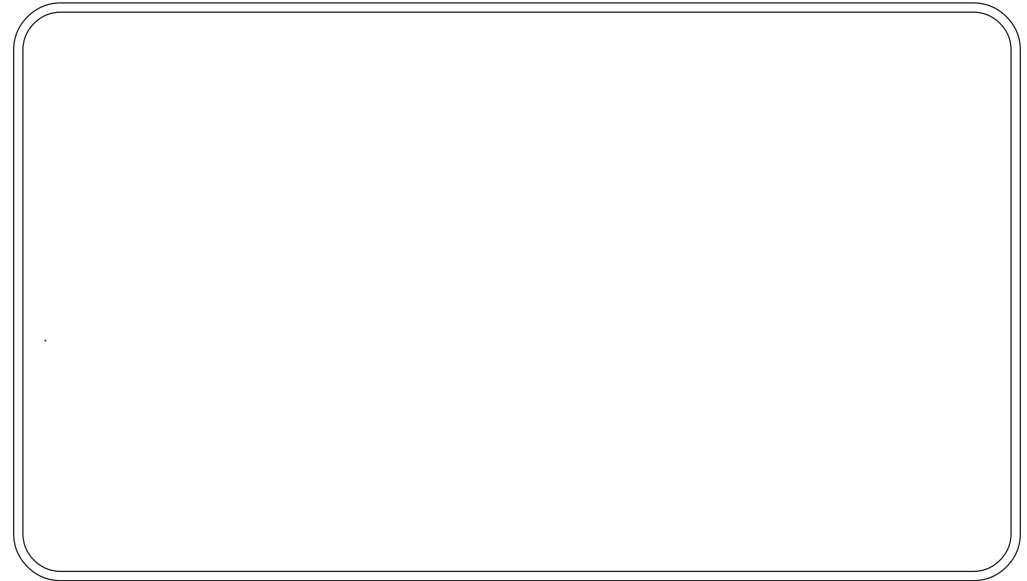
red-tailed hawk



cactus wren

## MY FAVORITE CACTUS

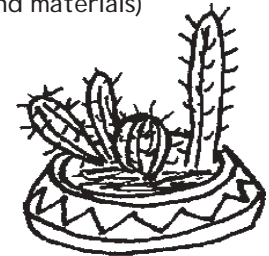
Draw a picture of your favorite cactus in the frame below. What is its name? \_\_\_\_\_



## MAKE YOUR OWN CACTUS DISH GARDEN

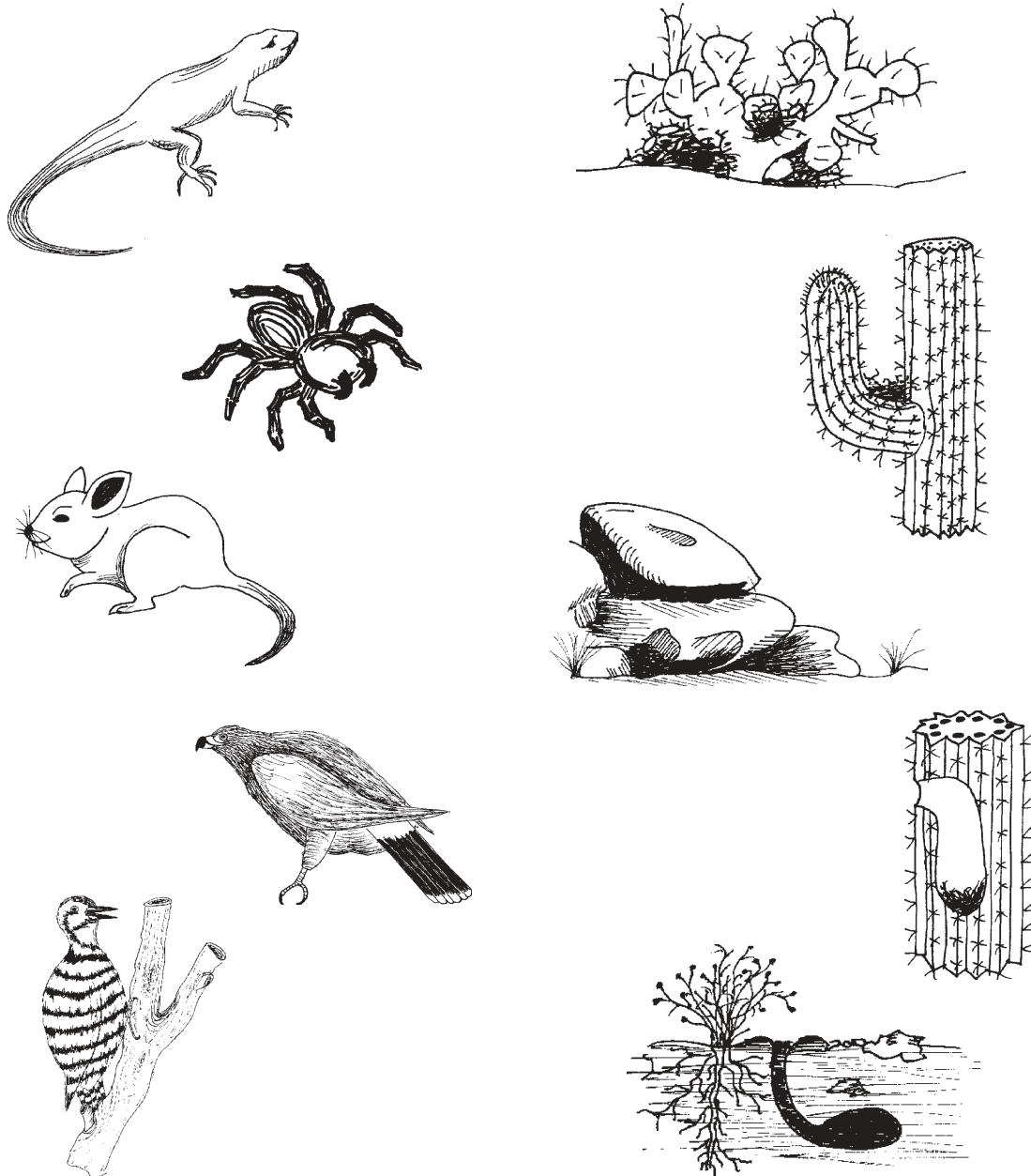
(visit the Greenhouse for ideas and materials)

1. Gather the following materials:
  - 4" clay or plastic pot
  - cactus potting soil
  - 2 or 3 small cacti
  - masking tape
  - small piece of newspaper
2. Place a 2" square of newspaper in the bottom of the pot, covering the drain hole. Fill the pot with soil.
3. Have someone help you wrap layers of tape over and around each finger and the thumb of one hand -- this will protect you while you handle the cacti.
4. Take each cactus from its pot, very carefully. Decide how you want to arrange them in your garden. Dig a hole with your fingers or a spoon and set the cactus in the hole. Push dirt around it to cover all the roots and press firmly around the top of the dirt to settle it in place.
5. Decorate the the dish garden with gravel or rocks. Water well and then only when the soil is dry. Happy Gardening!



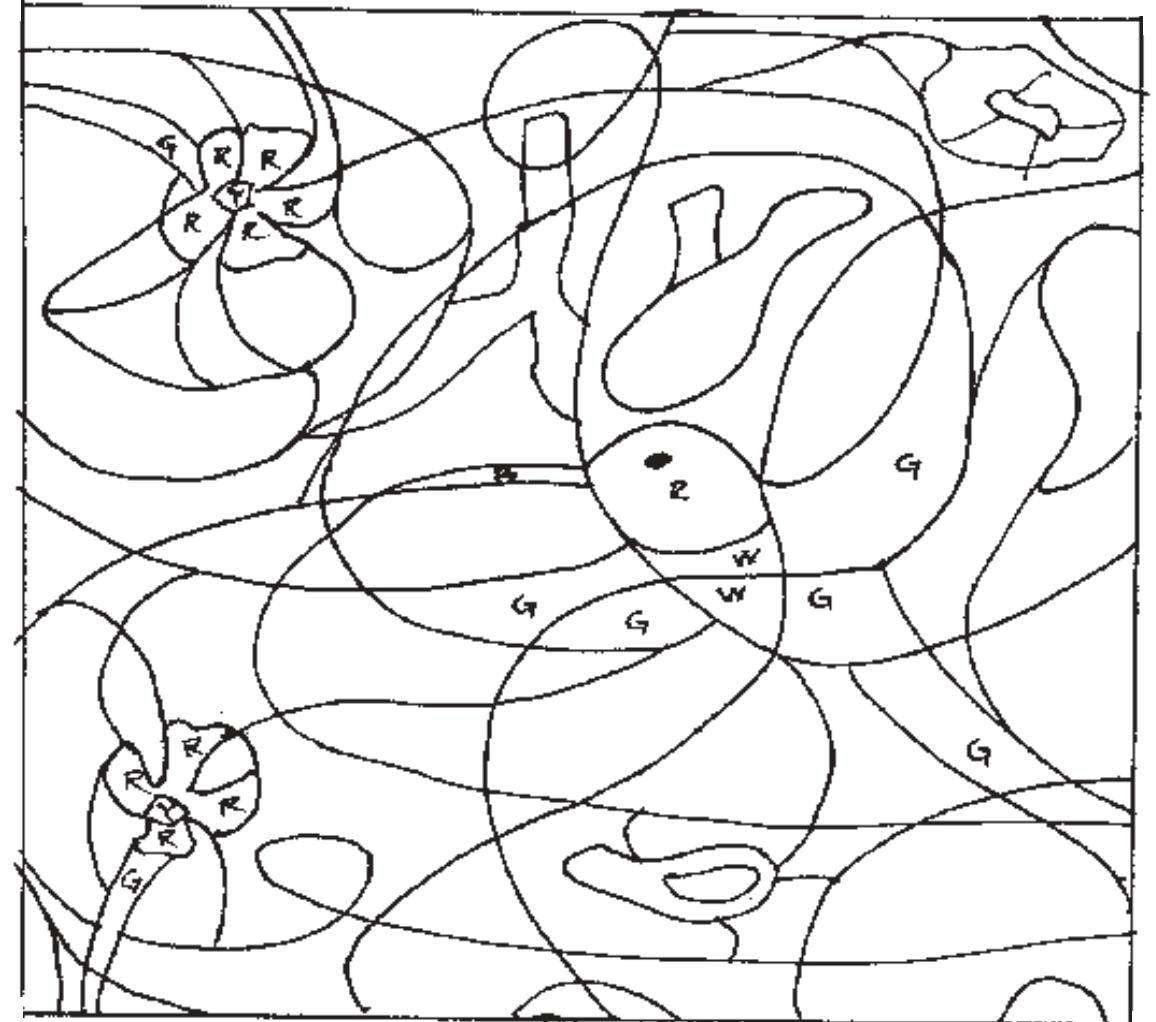
# ANIMALS OF THE DESERT

Like plants, the animals of the desert must be able to live in dry and sometimes very hot conditions. You can help each of these animals find a good place to live in the desert by drawing a line from the animal to its new home.



# HUMMINGBIRDS

Hummingbirds are very small, active birds. They are so little that you could hold two or three in your hand. They sip sweet nectar out of flowers with their long beaks. They particularly like red flowers in the shape of long tubes. Using the color code at the bottom of the page, color in the sections marked to find a hummingbird and its special flowers.



- R = Red
- G = Green
- Y = Yellow
- W = White
- B = Black

# BE A DESERT DETECTIVE

A detective looks for clues or signs. You can be a desert detective and look for signs that animals have passed this way. Look for such things as tracks, bits of fur, tooth marks on plants, holes in the ground or other homes like nests and rock piles. You might also find animal droppings. Can you find clues that tell you taht each of the animals below visited the Park? Write the sign on the line under the drawing.



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



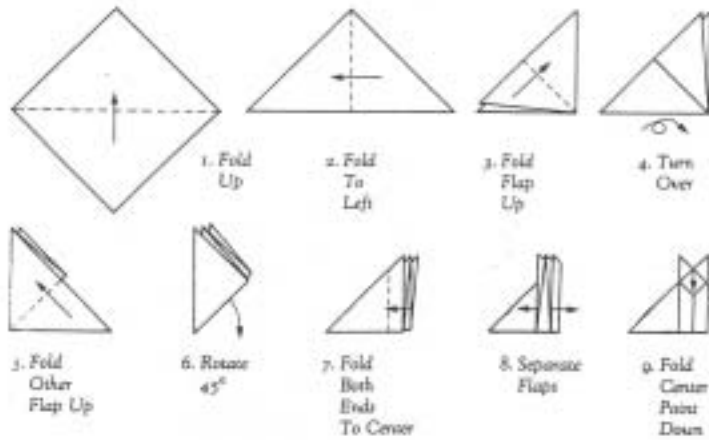
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## FOLD YOUR OWN COYOTE

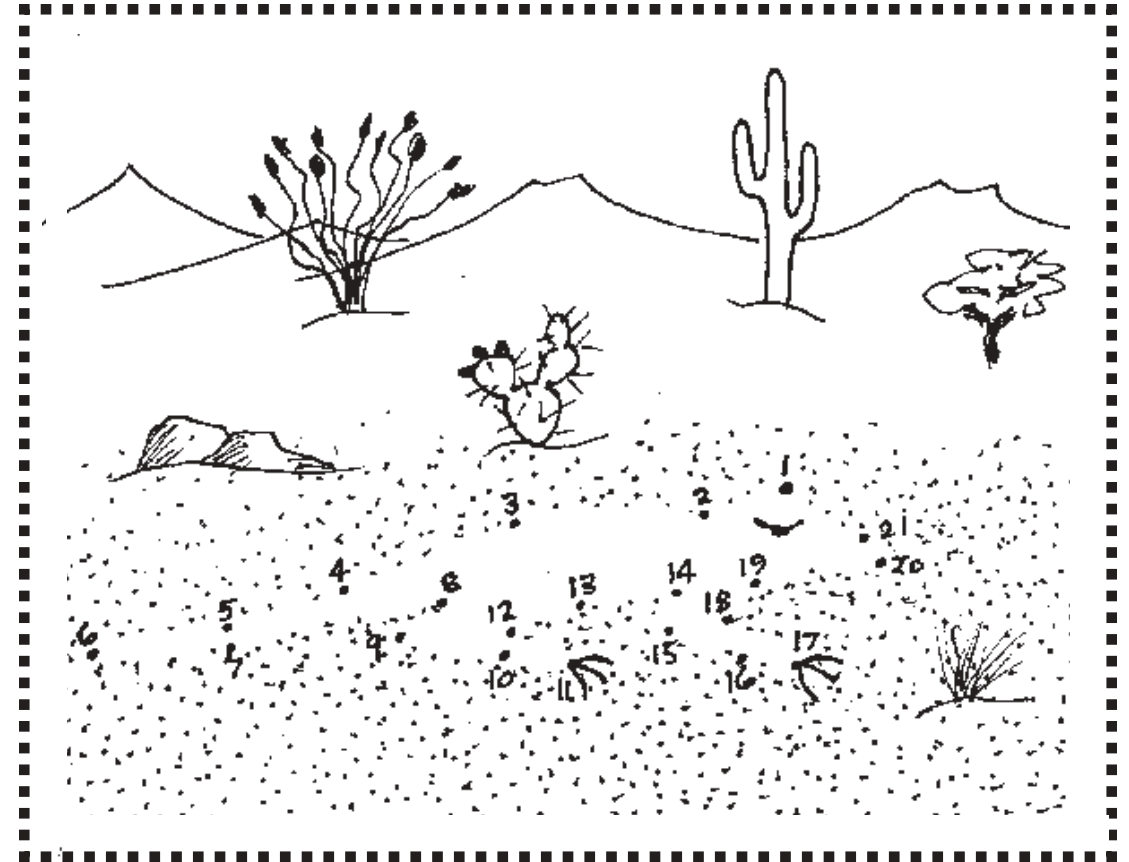
Follow these directions and make a family of coyotes of your own. How do coyotes "talk" to each other? Try talking with your coyotes.



(original design by Mitsuo Okuda)

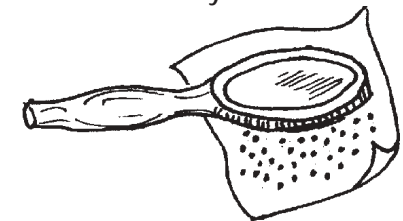
# HIDDEN?

Animals are often hidden by their colors and markings which match the area where they live. This is called camouflage. Connect the dots to find the lizard camouflaged in the sand.

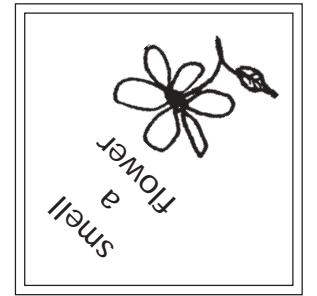
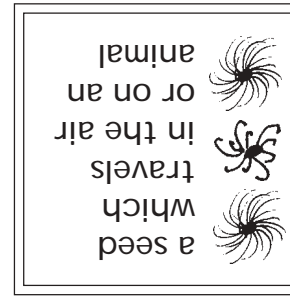
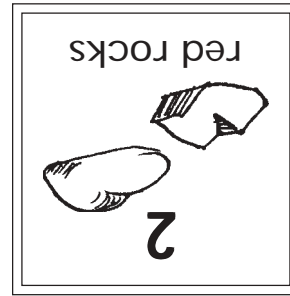
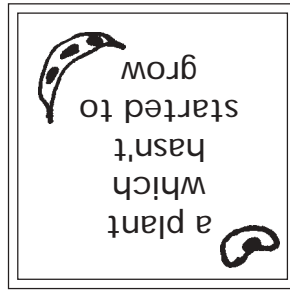
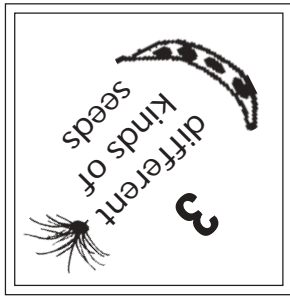


## TRY THIS!

Get a handful of sand and put it on a sheet of plain paper. With a hand lens or magnifying glass look at the grains of sand. Are they all alike? If not, how many different kinds can you count?







## DESERT DISCOVERY

(for 2-6 players)

1. Lay the game board on the ground. Choose a pebble for your marker.
2. Pick a number from 1-18. Starting with the square marked "1", move your marker clockwise that number of spaces.
3. Answer the question, find the item or perform the task asked for in the square you land on.
4. After everyone has had a turn, share what you did and learned.
5. Move four squares to your right for your next turn. If you land on a square that is already taken, go to the next empty one.
6. Continue around the board, taking turns until all the spaces have been used. Share your discoveries after each round.

