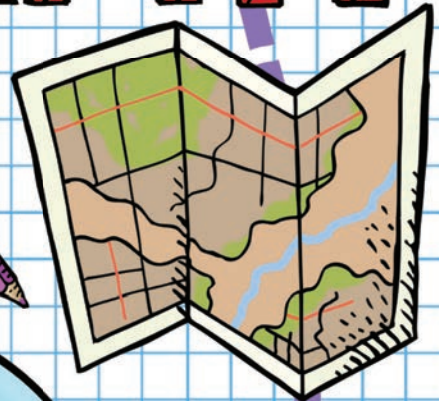




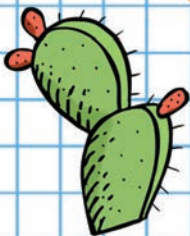
ADVENTURES IN

GEOGRAPHY

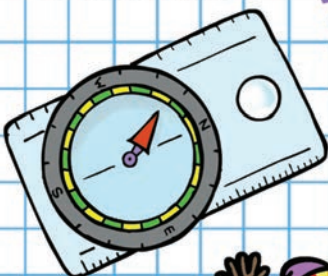


GRADE

3



Arizona
Studies



This Book Belongs To:



Credits

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Page 3

Photos (<https://npgallery.nps.gov/>)

Page 5, 9, and 13

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Page 12

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Farming source <https://www.farmflavor.com/arizona/arizonas-top-10-ag-products-infographic/>

Photos <https://www.loc.gov/item/2017879367/> and <https://www.loc.gov/item/2017786520/>

Page 13

Photos Ridge-nosed Rattlesnake and Tree Frog courtesy of Jeff Servoss, U.S. Fish and Wildlife Service

Apache Trout Photo courtesy of John Rinn, U.S. Fish and Wildlife Service

https://www.fws.gov/southwest/es/arizona/image_Lib.htm

Additional photos <https://npgallery.nps.gov/>

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Great Seal of Arizona-with permission from the Office of Secretary of State granted June 23, 2020

Pages 1, 2, 4, 5, 7, 8, 9, 11, and 13

Maps created by Arizona Geographic Alliance geoalliance.asu.edu

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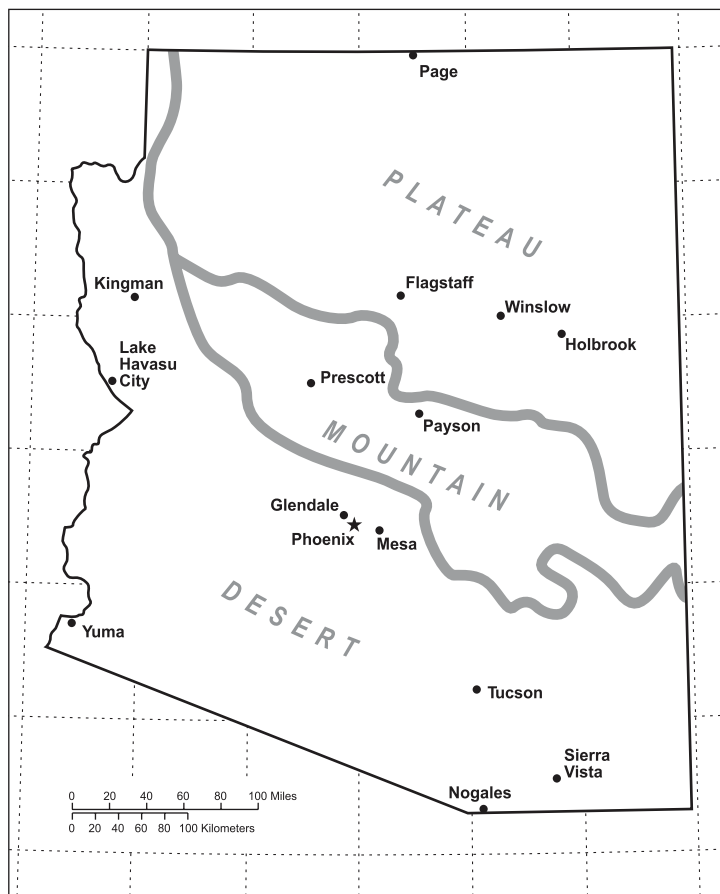
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Arizona's 3 Regions

Do This: Read about Arizona's 3 regions and answer the questions below.



Arizona has 3 landscape regions: Plateau, Mountain, and Desert. Find them on the map.

Plateau - The plateau region has tall, elevated, flat land separated by hills and canyons. Deer, coyotes, and javelina live here. Sagebrush and pinyon pine grow in this high desert.

Mountain - Most of the mountains are 4,000 to 6,000 feet high. We get much of our water from this region. Rainfall and snowmelt create the water. Animals found here include mule deer and black bear. Ponderosa pine trees and many wildflowers grow here.

Desert - The Sonoran Desert has many flat valleys bordered by mountains. There is little rainfall. The summer is hot for long periods of time. Palo Verde trees, saguaro and other cacti grow where jackrabbits, coyotes, javelina, Gila monsters and rattlesnakes live.

1. Below are pictures of each region. Write the landform name under the correct picture.



2. On the map, draw and color 2 plants and 2 animals that live in each landform.

3. In which landform do you live? _____

4. Which landform has the most towns and cities on the map? _____

5. Is your hometown or city shown on the map? _____
If not, add it where you think it is located.

What Lives in Arizona's Biomes?

Arizona has six different **biomes** (/bī ōmz/). Biomes are the areas in our state that have a certain climate (or weather) and certain types of animals and plants living there. The plants and animals of each biome have **traits** or behaviors that help them live and survive in their biome. Some plants and animals can live in more than one biome.

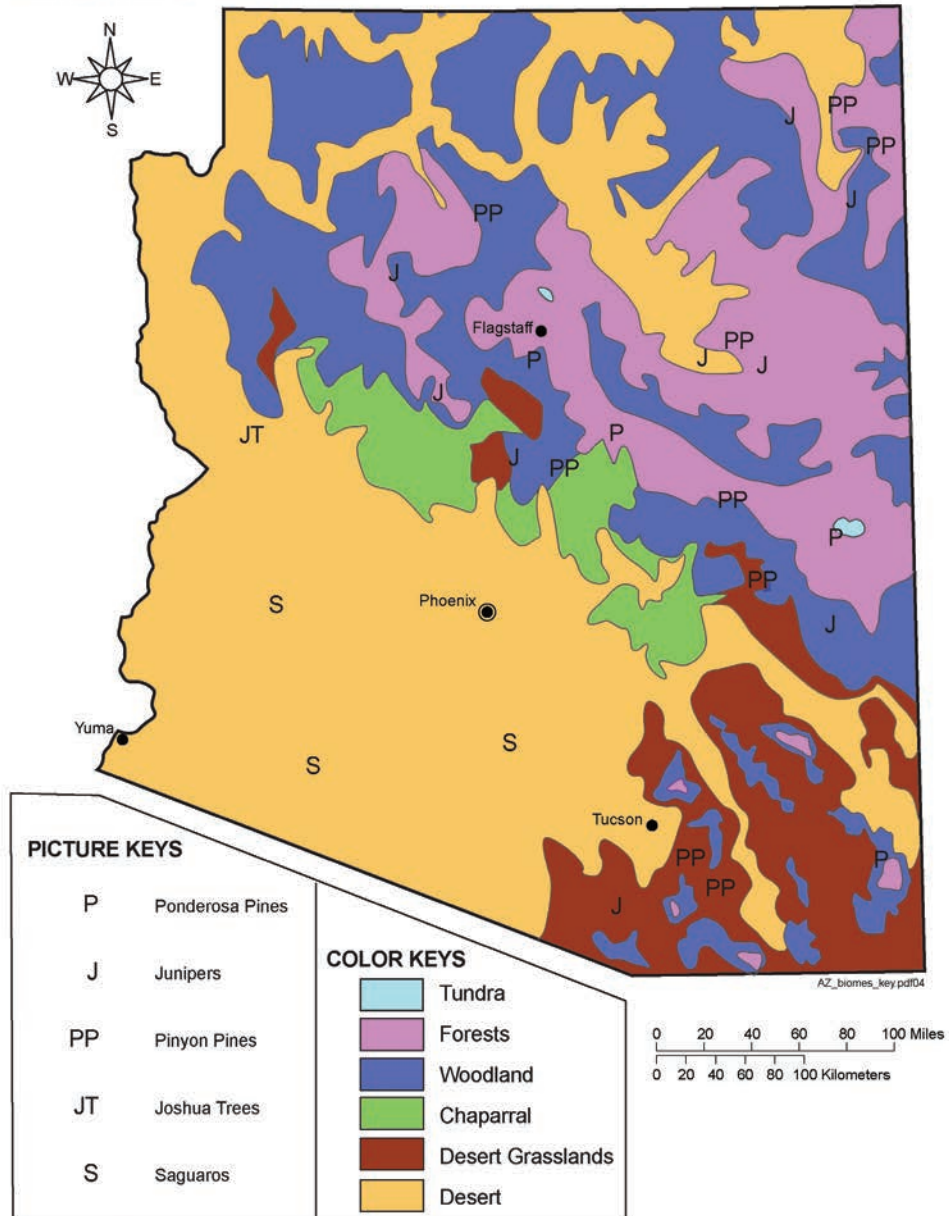
The map's two **Keys** tell us the names of each biome and of a plant that grows there.

Do This: Read the name of each biome and use the **Color Keys** to find it on the map. (Note that Tundra is found in only two small areas.) Next look at the **Picture Keys** to find the name of a plant that grows there.

Now find the biome in which you live on the map. Are you closest to Phoenix, Tucson, or Flagstaff?

Identify which biome your home is in and the plant that grows in that biome. Write them in the blanks below.

Arizona's Biomes



Courtesy: Arizona Geographic Alliance
Department of Geography, Arizona State University
Becky L. Eden, Chelsea Gratrix

I live in the _____ biome and
_____ grow here.

You will use the **Arizona's Biomes** map to answer the questions on the next page.

What Lives in Arizona's Biomes?

Do This: Read about two animals that live in Arizona. Use the **Keys** on the map of **Arizona Biomes** and the information written in the pictures to determine in which biome(s) each animal lives. Then draw a line to the name of the biome(s) you chose. Last of all, color the animals.



Biomes of Arizona:

Tundra

Forest

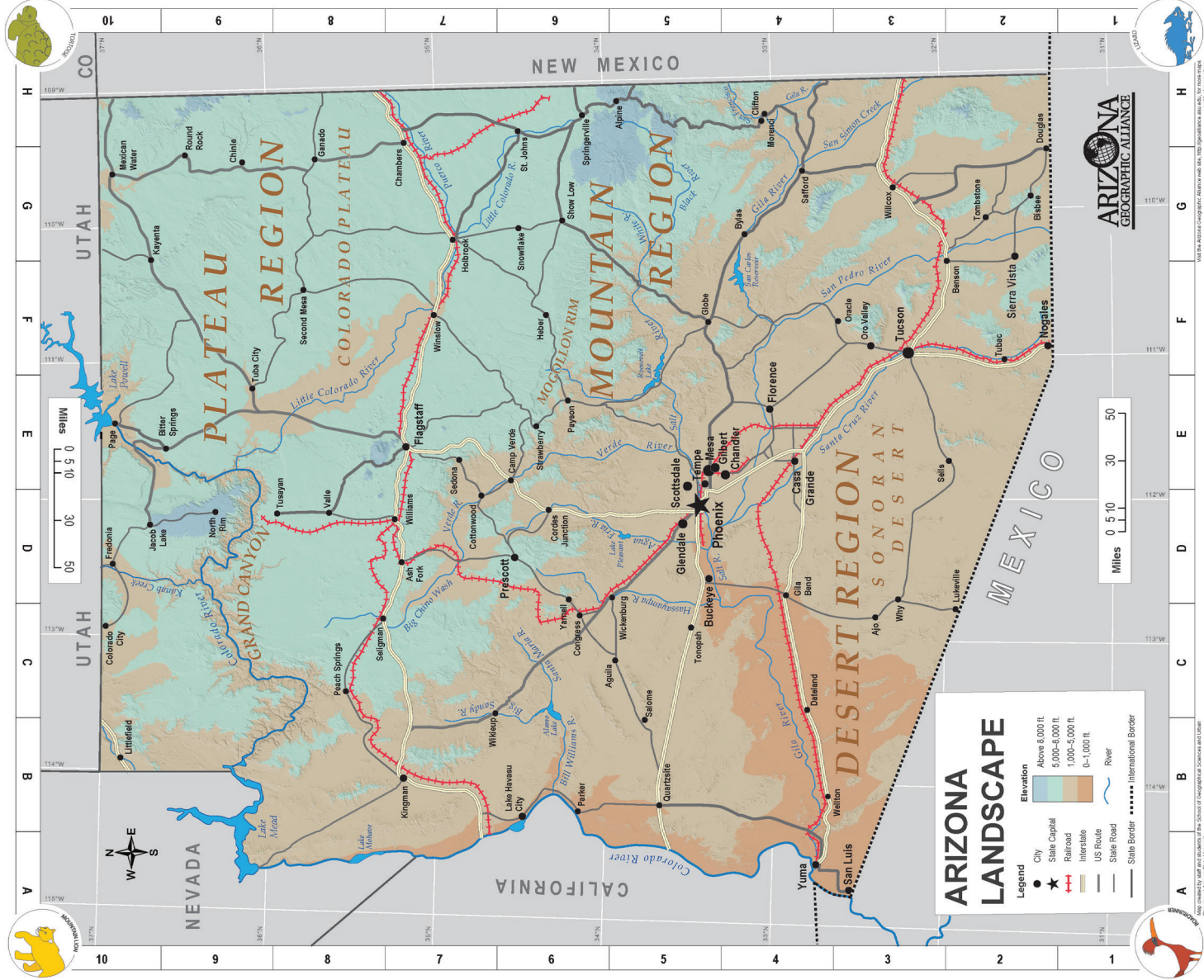
Woodlands

Chaparral

Desert Grasslands

Desert

Guess the Grid



Do This: At what grid (letter and number) would you find these Arizona locations? The first one is done for you.

Yuma _____ A-4 _____

Second Mesa _____

Flagstaff _____

Parker _____

Strawberry _____

Springerville _____

Willcox _____

Phoenix _____

Tombstone _____

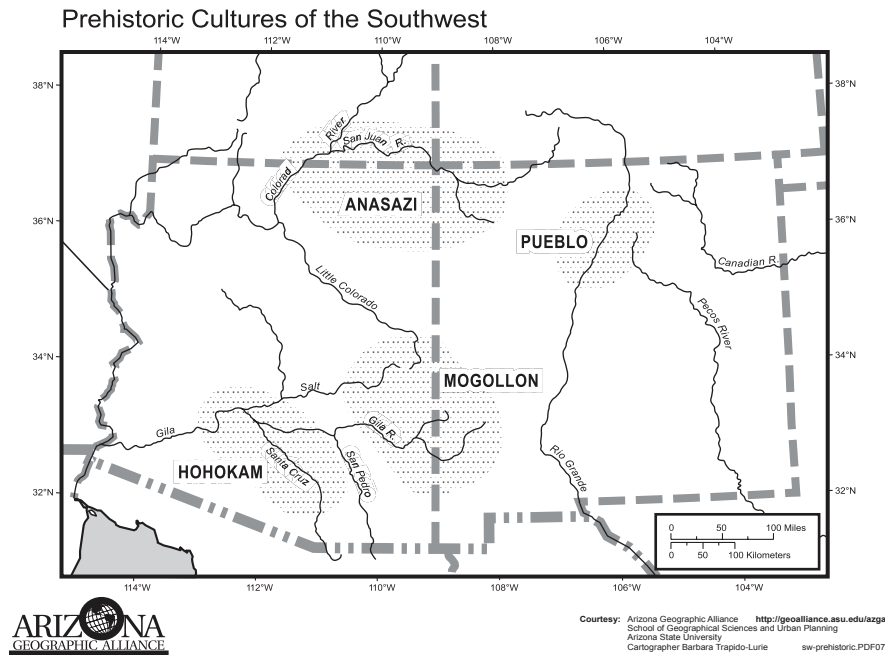
Chinle _____

Make up two grid questions (with the answer) of your own using this map.

The Hohokam, a Sonoran Desert Culture

The Hohokam Indians lived for hundreds of years in the Sonoran Desert along the rivers of southern Arizona. They were farmers who used water from the rivers to grow crops. Along with their crops, they used many desert plants for food, clothing, and shelter. They **used natural resources** from the Sonoran Desert to **fulfill their basic needs**.

Do This: On the map below, shade in the area where the Hohokam lived. Find the Salt and Gila Rivers and circle their names.



What desert resources did the Hohokam use to live in the desert?

Food - Saguaro cactus seeds and mesquite tree beans were ground into flour. Other cactus buds and pads were cooked for food. They hunted birds, rabbits, snakes and lizards. They caught fish in the rivers.

Shelter - Clothing was made from animal skins and plants, such as the yucca. Mesquite tree wood was used for firewood. Saguaro cactus ribs were used to build their houses.

Tools - Stones and large sticks were used for digging. Leaves of yucca and other plants were used to make baskets for gathering and storing food. Pottery for cooking and storing food and water was made with clay and sand from the desert washes. Many pots were decorated using a brush made from a yucca leaf and red paint made from crushed desert rocks.

Do This: Below each photo below, describe how the Hohokam used each plant. Write **F** for food, **S** for shelter, and **T** for tool.



Saguaro Cactus



Mesquite Tree



Yucca Plants

The Hohokam, a Sonoran Desert Culture

The Hohokam also **changed the desert to fulfill their basic needs**. They dug canals from the rivers to water the crops in their fields. They dug miles of canals in both the Salt River and Gila River valleys using only stone tools, digging sticks, and baskets. With water from the rivers, they were able to grow corn, beans, squash, and cotton in the desert.

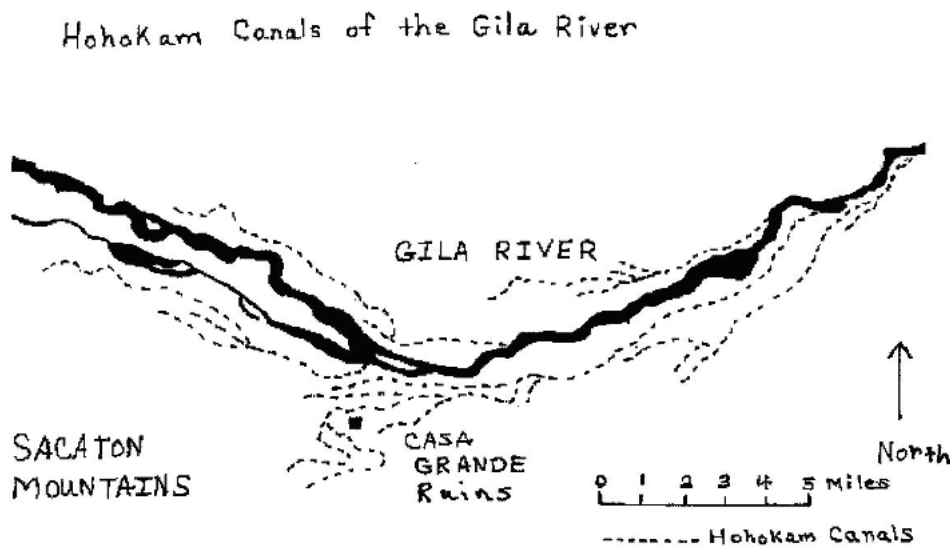
Do This: Below is a map showing the Hohokam canals on the Gila River. Look at the map and find its **key**. It tells you that **dotted lines** show where canals were dug. You can see that there are many more canals on the south side of the river than on the north side. Next, look at the **map scale**. It shows you that **1 inch on the map stands for about 5 miles**.

1. Use a ruler or string to **measure the length of each canal (dotted line) on the north side of the Gila River** to the nearest mile and add them together to estimate the total. Use the space to the side of the map to write your measurements and do your addition. Next write your total in the answer sentence.

2. You can now estimate the **total for both the north and south sides** by adding **your total** for the north side to the number of miles dug on the south side (**61 miles**). Write the new total in the answer sentence.

Hint: It's hard to measure lines that curve, but try your best!

Show your work here.



There were about _____ miles of canals on the north side of the Gila River.

South side 61 miles

North side + _____

Total - miles

There were about _____ miles of Hohokam canals dug on the Gila River.

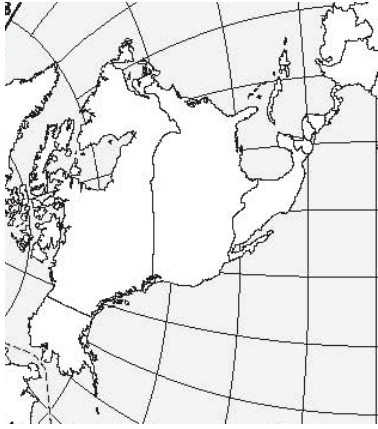
Try this! (Have an adult help you!)

Make a Yucca Brush

1. Cut a small rectangular piece from a yucca leaf (about $\frac{1}{2}$ inch wide and 3 to 4 inches long.)
2. Put it on a folded newspaper or a flat rock.
3. **Gently** tap on one end with a small rock until you have crushed off the green outer coating of the leaf. (**Hint:** Pound and split fibers **only $\frac{1}{4}$ to $\frac{1}{2}$ inch back from the end of the leaf.**) You will then see white fibers. These fibers are the brush.
4. **Gently** split the fibers apart with your fingers and your brush is ready for painting.
5. Draw a piece of pottery on paper and decorate it using paint and your **yucca brush!**

Follow the Arrows to Learn About Arizona Through Time!

Do This: Study each map and read about the land that today we call Arizona. Then draw an X in the place on the map where Arizona would be located. Use the colored map at the bottom for help.



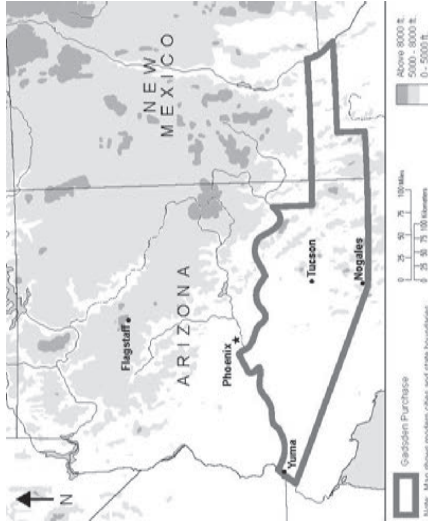
Native Americans were the first people in the Americas. They hunted and farmed all over the continent.



The Spanish were the first Europeans to explore the Americas. In 1521 they claimed much of the land and called it New Spain. Arizona was part of that land.



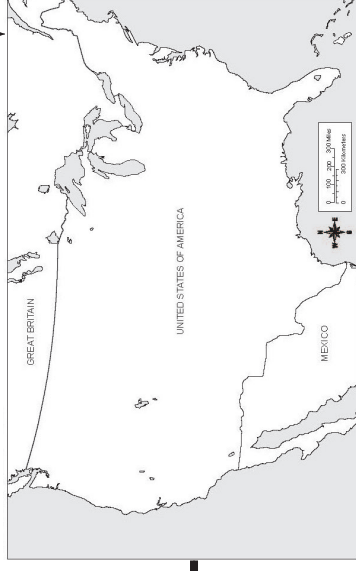
In 1821, the people of Mexico fought with Spain to become a country of their own. Arizona was now part of Mexico.



In 1854, the Gadsden Purchase added the last part of New Mexico Territory to the United States. In 1863, Arizona became a territory of its own.

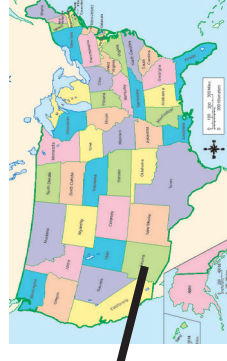


In 1850, Arizona became part of the New Mexico Territory of the United States. The borders of New Mexico would change as land was given to other territories.



In 1848, after a war, Mexico was forced to sell most of their land in the Southwest to the United States. Arizona was part of that land.

ARIZONA



(Answers on inside back cover)

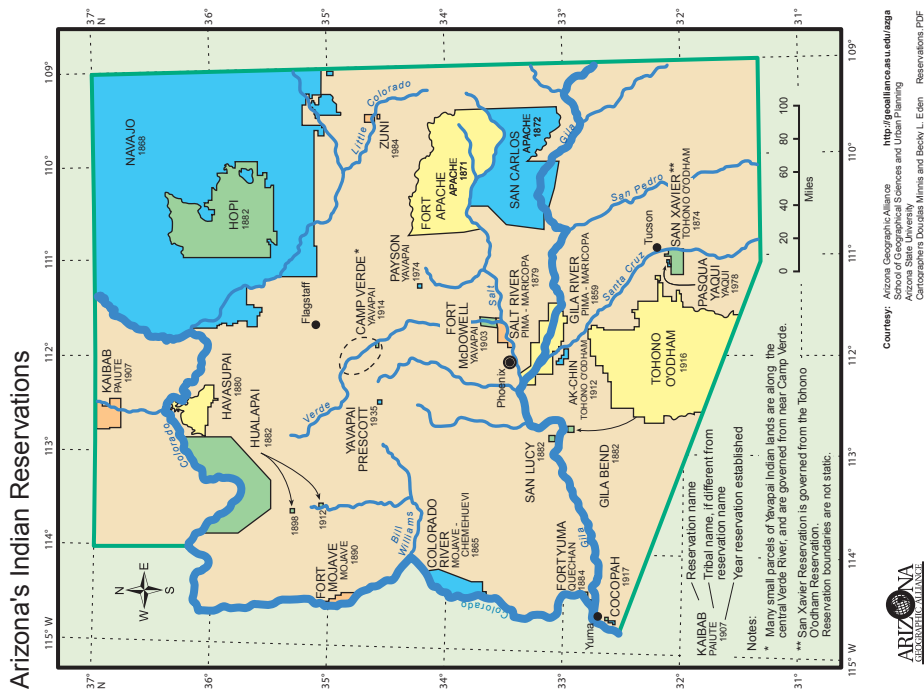
Arizona became the 48th state of the United States on February 14, 1912!



Arizona's 10 Largest Indian Reservations (in land area)

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

Do This: Find the 10 largest reservations on the map and circle them. Note: White Mountain (MT) Apache is on the map as Fort Apache.



Do This: Find the 10 largest reservations in the word search.

- | | |
|-------------------|-----------------|
| Navajo | Tohono O'odham |
| San Carlos Apache | White MT Apache |
| Hopi | Hualapai |
| Gila River | Colorado River |
| Havasupai | Kaibab Paiute |

Arizona's Landmarks -- Human or Physical Features?

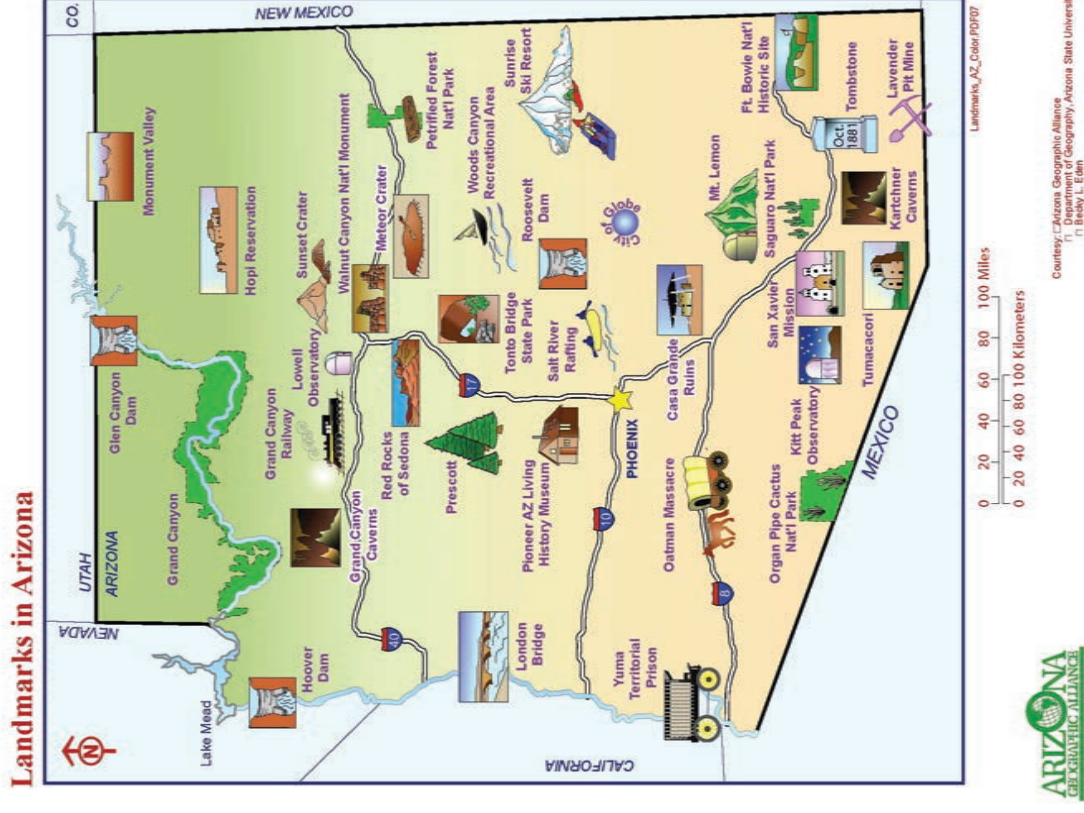
Arizona has many landmarks. Some of our state's landmarks are pretty places in our deserts, mountains, and plateaus. Other landmarks tell the story of Arizona's history and its earliest peoples. Remember that **human features** are made by people (roads, cities, buildings) and **physical features** are made by nature (rivers, hills, canyons).

Do This: Find these landmarks on the map. Decide if they are a physical feature or a human feature. On the line, write **P** for physical or **H** for human. Use the pictures and names to help you decide.

1. London Bridge _____
2. Casa Grande Ruins _____
3. Petrified Forest _____
4. Grand Canyon _____
5. Roosevelt Dam _____
6. Phoenix _____
7. Meteor Crater _____
8. Kartchner Caverns _____
9. Mt. Lemmon _____
10. Sunset Crater _____
11. Grand Canyon Railway _____
12. Monument Valley _____

What is your favorite place in Arizona? _____
Why? _____

Try This! On another piece of paper, draw and color a picture of your favorite place in Arizona!

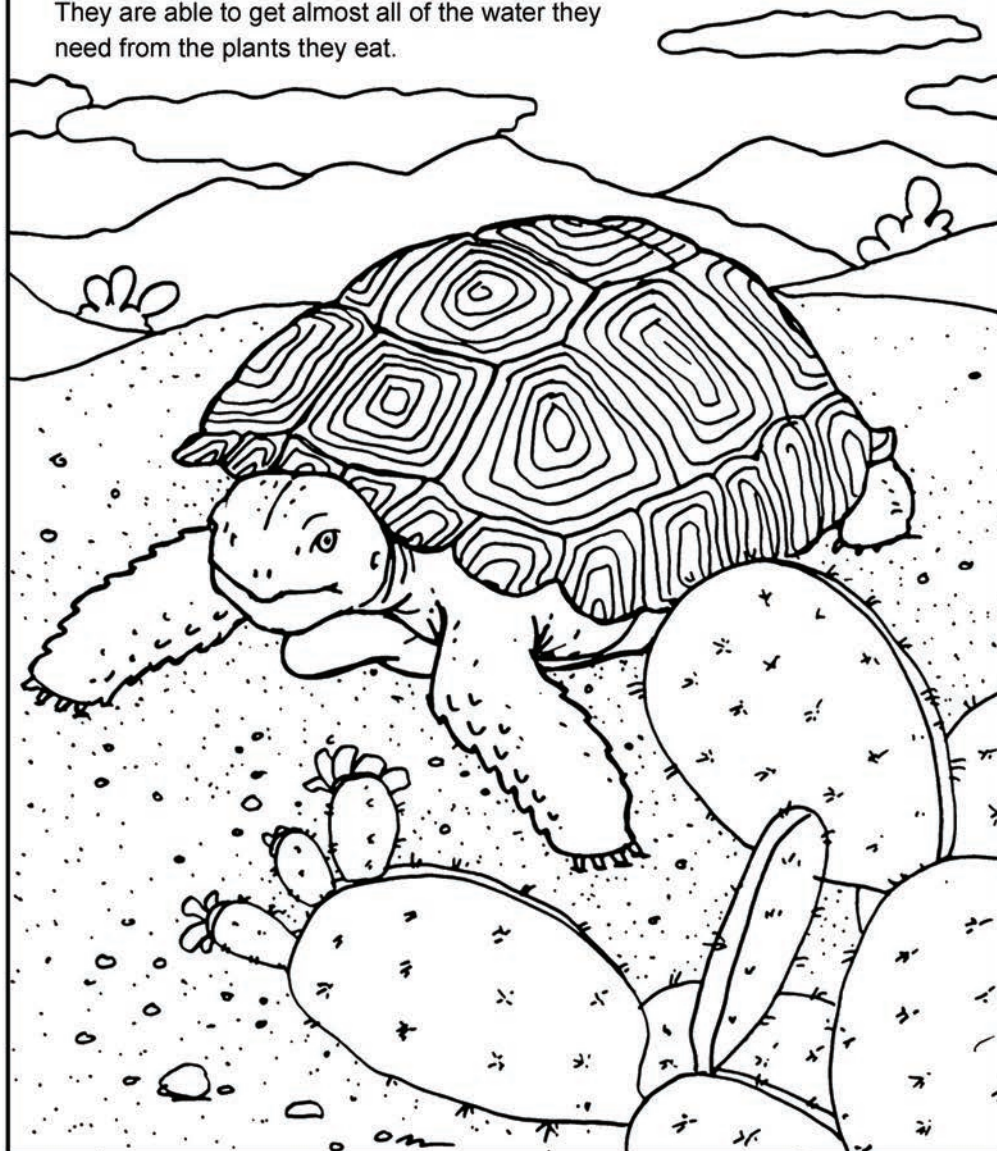


Courtesy: Arizona Geographic Alliance
 (1) Department of Geography, Arizona State University
 (2) Baby L. Egan

Our Sonoran Desert

Desert Tortoise

Desert tortoises are well suited for life in the desert.
They are able to get almost all of the water they
need from the plants they eat.



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Do This: Color the Desert Tortoise and the area where they live.

Do This: Circle the following physical features in the coloring book page about the Desert Tortoise.

prickly pear cactus
tortoise shell

fruit of the prickly pear
soil

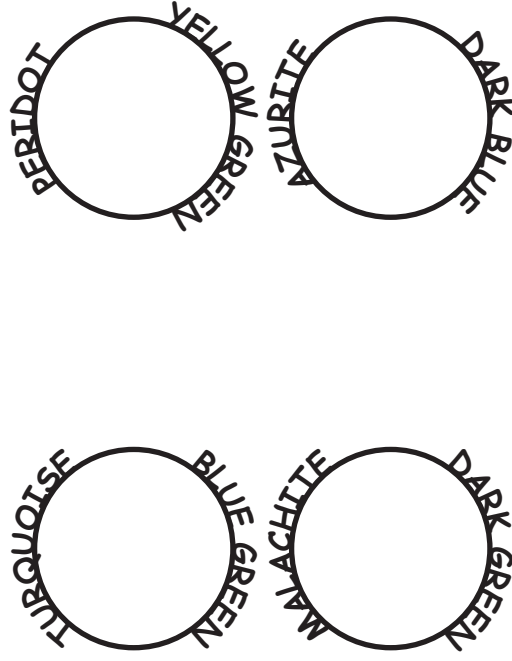
mountain
cloud

Fun Fact: The fruit of the prickly pear cactus has been eaten by people of the Sonoran Desert for many centuries. The fruit is very sweet and can be used in beverages, jellies, and candies.

Minerals, Mining, and Me

Arizona is world famous for its turquoise, peridot, malachite, and azurite.

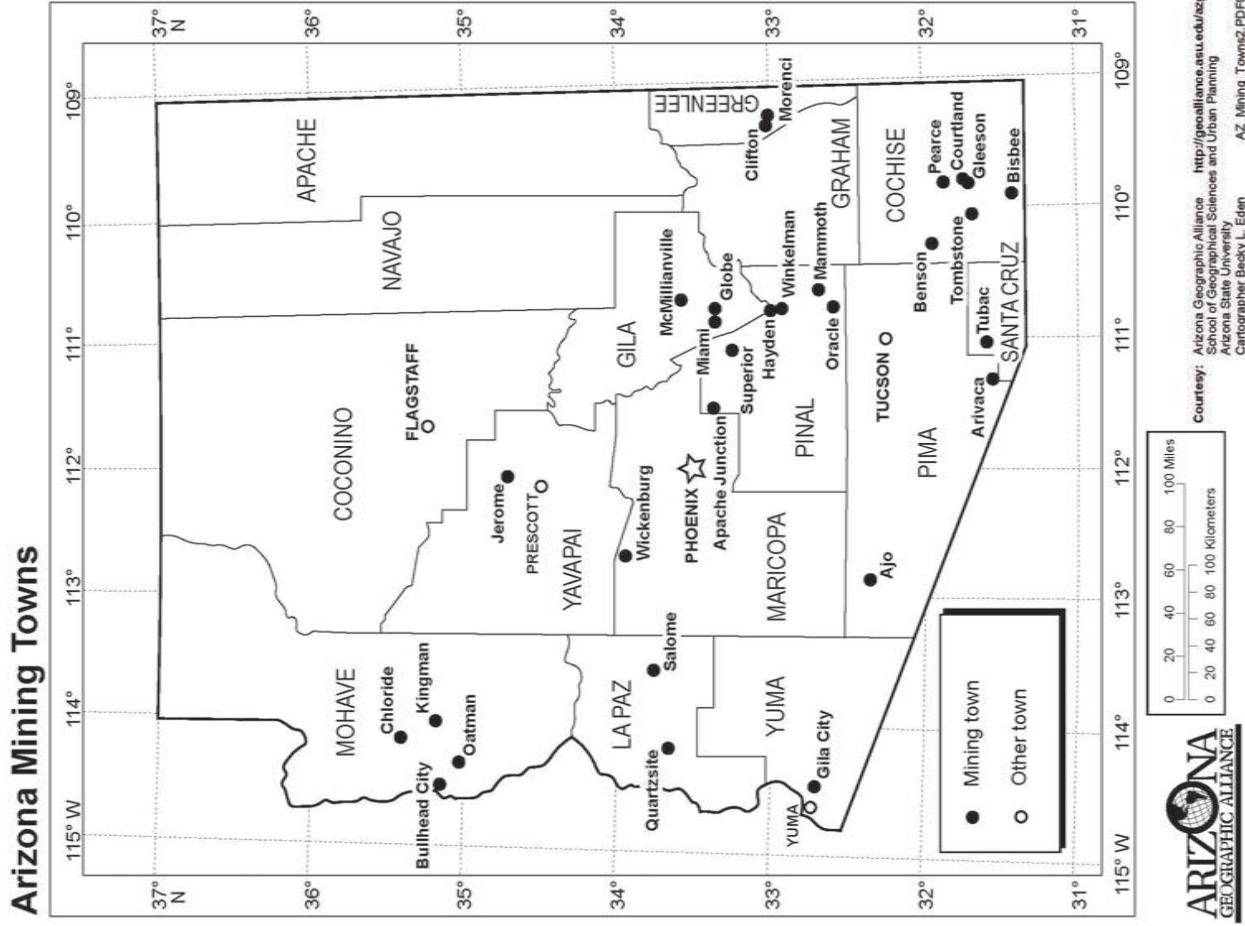
Do This: Color in the gemstones to see how pretty they are.



The map shows historical mining towns and other larger cities. Miners usually went to larger city to buy supplies.

Do This:

1. What larger city would a miner from Wickenburg most likely travel to? _____
2. What larger city would a miner from Globe most likely travel to? _____



Do You Like Tacos? I Bet You Do!

Do This: Circle the ingredients that most likely come from Arizona.



Taco Ingredients

- corn for the tortillas
- ground beef
- lettuce
- tomatoes
- cheese

Agriculture in Arizona

The first agriculture in Arizona was done by the Native Americans. They grew melons, beans, squash, and corn. Today the top 10 agricultural products sold in Arizona are: cattle and calves (\$892 million), dairy products (\$762 million), lettuce (\$705 million), hay (\$228 million), lemons (\$149 million), wheat (\$126 million), cotton (\$116 million), cantaloupes (\$81 million), and spinach (\$55 million).

Farming Changes

From the first farmers in Arizona planting, watering, and harvesting by hand to today, farming has changed.

Do This: Number (1,2, or 3) the following pictures in order with the oldest picture being #1.







Where are Our State Symbols Located?

Do This: Use the **Map Grid** to locate where some of our state symbols can be found. Read about each symbol, find the grid location on the map, and draw a line to the symbol's picture.



State Reptile

Ridge-nosed Rattlesnakes are small snakes with a white stripe and raised ridge along their nose. They are found in the mountains of southern Arizona at **F-2**.



State Flower

Saguaro Cactus Flowers bloom in the desert in May and June. An area they can be found is **E-3**.



State Fossil

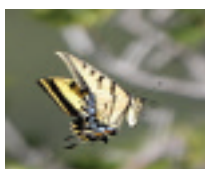
Petrified Wood are fossils of tall trees that lived long ago. They can be found in the Petrified Forest National Park in **G-7**.

State Amphibian

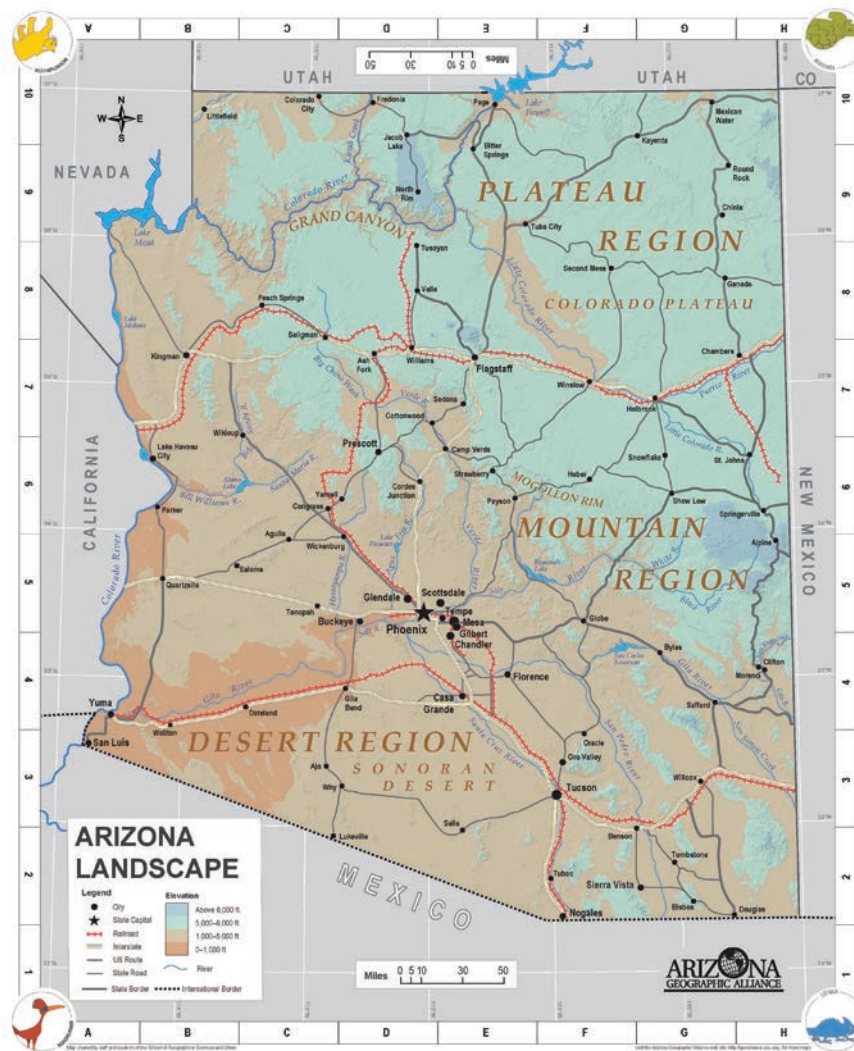


Arizona Tree Frogs are less than 2 inches long and usually green with a dark stripe. One area they live in is at **F-6**.

State Butterfly



Two-tailed Swallowtails are large butterflies with blue and orange bars on their wings. One area it is found is in **C-9**.



State Dinosaur



Sonorasaurus was 49 feet long, 27 feet high, and weighed 42 tons. Its fossil was found in the mountains in **F-2**.

State Fish



Apache Trout can be found only in the small, cold-water streams of the White Mountains of Arizona in **G-5**.

State Tree



Palo Verde Trees have green trunks and branches. They grow in the foothills and deserts of Arizona. Find some at **B-4**.

State Gemstone



Turquoise is a beautiful stone used to make jewelry. Most turquoise is found where copper is mined in Arizona, such as in **H-4**.



State Metal

Copper mining has been important in Arizona since the 1800s. Copper mines can be found in different areas of the state. A mining area is in **C-6**.

Here are More State Symbols for You to Read About and Color!

RINGTAIL

The ringtail is the official mammal of Arizona. It was named the state mammal in 1986. The name "ringtail" comes from the seven or eight black and white rings on the animal's tail. Ringtails are sometimes called ringtail cats or miner's cats. They are not really cats but are relatives of the raccoon.

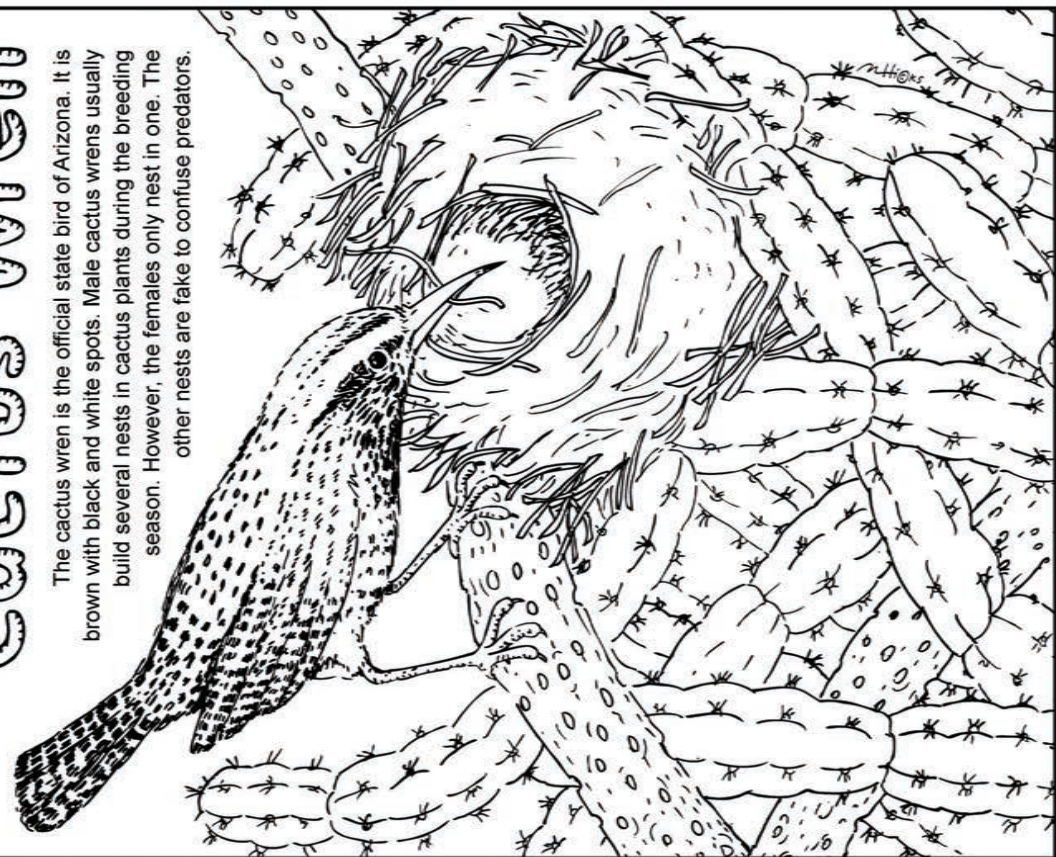


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Cactus Wren

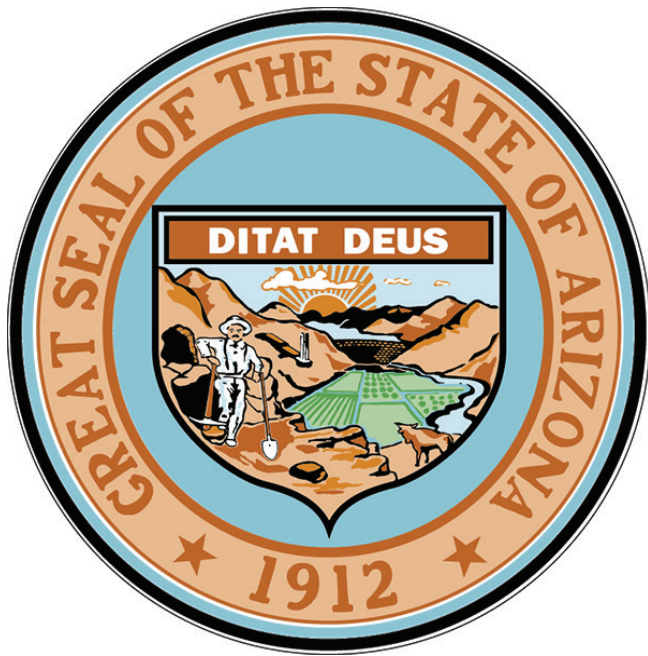
The cactus wren is the official state bird of Arizona. It is brown with black and white spots. Male cactus wrens usually build several nests in cactus plants during the breeding season. However, the females only nest in one. The other nests are fake to confuse predators.



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What is your favorite state symbol? _____

The Great Seal of Arizona and the Five Cs



This is the Great Seal of Arizona. A state seal is meant to show important things about that state. In the early years of the state, the five Cs served to show off Arizona's good economy. The five Cs are: copper, cattle, cotton, citrus, and climate.

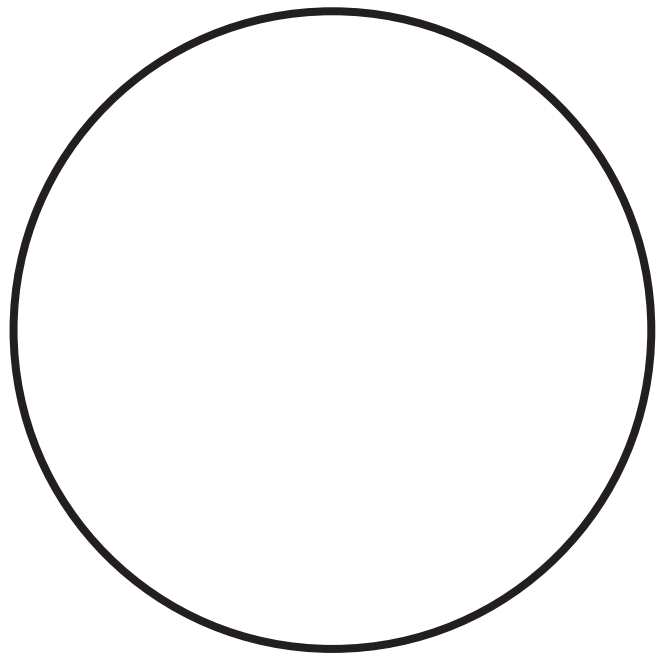
Do This: Can you find something in the seal that could represent these Cs? Draw a line from the word to the part of the seal that would represent this C.

- Copper
- Cattle
- Cotton
- Citrus
- Climate

This seal represents the past of Arizona.

Do This: Can you create a new seal that represents the future of Arizona? What five things would you include? Then draw your seal in the space to the right.

- 1.
- 2.
- 3.
- 4.
- 5.

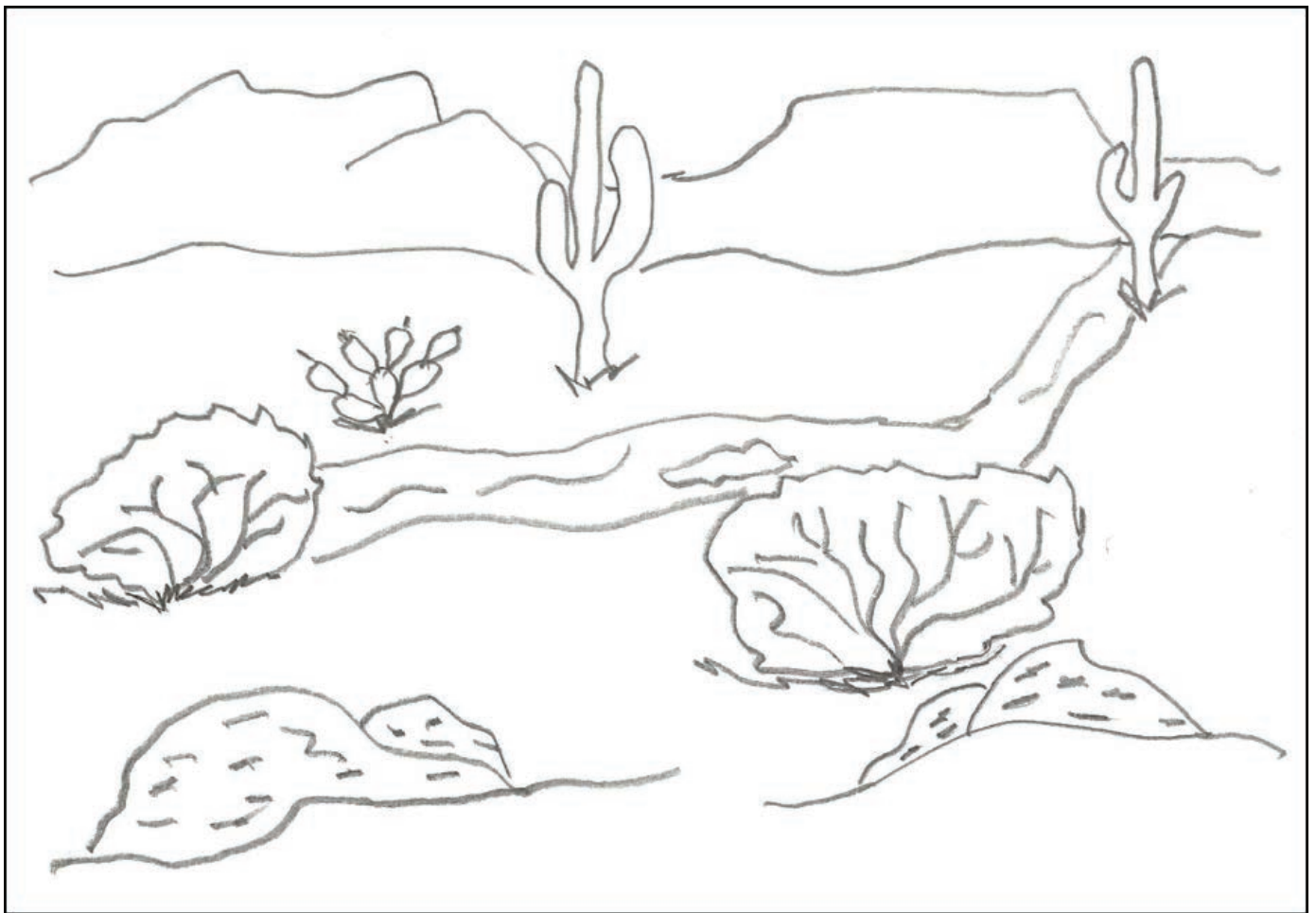


Monsoon Days

The term "monsoon" refers to the wind shift that brings us thunderstorms during the summer months of late June, July, August, and early September. A summer monsoon storm can be dangerous. It is important to know what to do during these storms to stay safe.

- If you hear thunder, you are close enough to a storm to be struck by lightning. Go to a safe place immediately! The safest locations are sturdy buildings. Wait there until 30 minutes AFTER the last rumble of thunder is heard.
- Arizona thunderstorms have strong winds, sometimes more than 40 miles per hour. Move indoors to avoid flying objects.
- Do not play near washes or storm drains during or after any rainstorm. These flood easily and quickly.

Do This: Add rain and two desert animals to the picture. Then color the picture showing desert plants, rocks, a wash filled with water, mountains, and a mesa.



Answer Page

Page 1

- Desert, plateau, mountain
- Answers will vary, but each item should be as listed in text.
- Answers will vary.
- Desert region
- Answers will vary.

Page 2

Answers will vary.

Page 3

Left picture: Desert or desert grasslands
Right picture: (Ponderosa pine) forest

Page 4

Yuma (A-4), Second Mesa (F-8),
Flagstaff (E-7), Parker (B-6),
Strawberry (E-6), Springerville
(H-6), Willcox (G-3), Phoenix (D-5),
Tombstone (G-2), and Chinle (G-6)

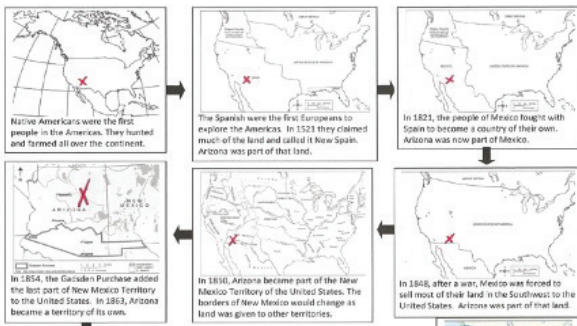
Page 5

Saguaro (F, S) Mesquite (F, S) Yucca (S, T)

Page 6

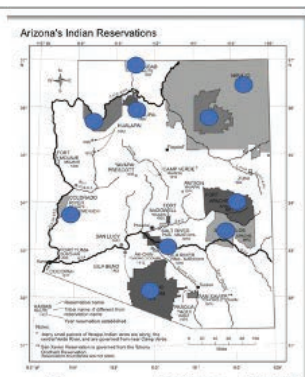
There were about 20 miles of canals on the
north side of the Gila River.
There were about 80 miles of Hohokam
canals dug on the Gila River.

Page 7



Page 8

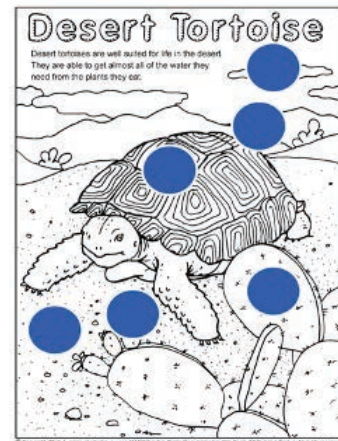
M I S P X G I L A R I V E R M O L Z K J
J F R R O L T Z D S B I T A Z N U H C P
W J D I X F X C M R K B H Y Y Y F W
T G V L H Z S G P O T D I B R M J K O W
O W D F Q Y D Z R V O M A Y P M V C S V
D B Q D O Y J G U O E S Z L A M Y K U S
I Z H F B C O L O R A D O R I V E R K A
D E U G V X D N Z Z H A V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



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- London Bridge H
- Casa Grande Ruins H
- Petrified Forest NP P
- Grand Canyon P
- Roosevelt Dam H
- Phoenix H
- Meteor Crater P
- Kartchner Caverns P
- Mt. Lemmon P
- Sunset Crater P
- Grand Canyon Railway H
- Monument Valley P

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- Phoenix or Prescott
- Phoenix

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Taco: All of these ingredients could come from Arizona, but Arizona is known for growing lettuce (only in the winter) and beef. Tomatoes mostly come from Mexico and corn from states like Iowa, Illinois and Nebraska. Beef also comes from Texas, Nebraska, and Kansas. Wisconsin and California are known for making cheese.
Farming: 3, 1, 2

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