Junior Arizona Archeologist

National Park Service U.S. Department of the Interior



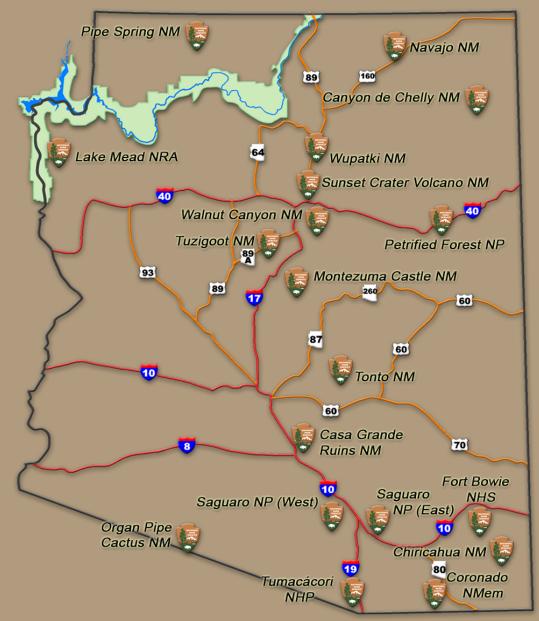


So What is the National Park Service?

The National Park Service is a group of people devoted to protecting our nation's special places. We are here to make sure everyone has the opportunity to explore and learn from these important places, from the beautiful scenery of Saguaro National Park to the sacred landscapes of Canyon de Chelly National Monument and the historic battlefields at Fort Bowie National Historic Park.

NATIONAL PARK SERVICE

> Archeologists are scientists who study people of the past. By visiting Arizona's National Park Service sites, you will learn times, places, and cultures that inhabited Arizona long ago. The Ancestral Puebloans, Hohokam, Mogollon, Salado, and Sinagua survived in a harsh desert environment by using their creativity. Many other people have followed in their footsteps. Use your creativity to complete the activities in this book.



This is

's Book

In order to receive the Junior Arizona Archeologist patch, you must visit at least 4 of the following 18 National Park Service (NPS) areas. Remember to get a passport stamp and a Ranger's signature once you have completed the activities on the brown page for each site visited. The optional activities on the green pages can be done at home, or in the car on the way to your next archeological site!



Canyon de Chelly NM

Useful Plants: Be an ethnobotanist: a scientist that studies how people use plants! Choose a favorite plant at Canyon de Chelly. Hint: pick up a brochure from the Visitor Center.

Write its name in English and in Navajo_

Plants can be eaten or taken as medicine, can be used to build houses or tools, or could be grown to use for special events and ceremonies. What uses might this plant have?

What do you like most about this plant?___

A Picture Perfect Plant:

What culture occupied this canyon 600 to 2,000 years ago?

What culture lives in the canyon now?

Why would people want to live in this canyon?



Word Search:

Р	С	R	J	Х	R	Μ	Ν	V	E	А	Р	V	Q	Μ	Ζ	S	Т	E	Ζ
Ι	R	Ο	Ā	G	W	G	Q	Т	S	R	Η	Ι	F	Ο	Ν	S	Т	E	Y
Ο	Ι	Ι	Y	V	Т	D	Ο	Ο	Ι	С	S	Т	Т	Α	Ο	Ι	А	Ζ	Ν
L	W	В	С	Ο	E	S	V	R	Ο	Η	Α	Α	E	Η	U	E	Ζ	L	Κ
Ν	Q	S	E	Κ	Т	Ν	Т	Т	U	E	U	В	Κ	Q	Ο	В	G	G	В
V	E	J	L	W	L	E	J	Ο	Q	Ο	Q	W	S	V	E	U	Μ	L	В
А	С	С	U	Y	Η	Y		Ι	R	L	S	E	V	Q	Ν	E	S	R	Т
Y	R	L	E	W	E	J	Р	S	U	Ο	Μ	В	Y	R	Т	Ο	R	E	Η
Η	E	V	Q	Т	Ζ	Y	Χ	E	Т	G	L	U	F	Α	Ν	Ο	F	Ο	Y
D	Α	E	Η	W	Ο	R	R	Α	Α	Y	J	Μ	Т	Α	Α	Т	Η	S	R
Μ	Ο	G	Ο	L	L	0	Ν	E	Т	R	Ο	E	Μ	D	0	Ο	D	Η	E
S	Ι	Ν	А	G	U	А	А	J	Р	R	V	D	R	J	Κ	V	С	Q	Т
Κ	Μ	W	D	Ο	L	В	E	U	Р	Ι	U	U	А	Α	Р	В	Χ	Ο	Т
А	G	R	Ι	С	U	L	Т	U	R	E	Ν	Ο	Μ	L	W	D	R	L	Ο
Μ	А	С	А	W	Ν	Μ	Т	E	V	Ν	Ζ	U	С	В	А	Α	U	Ι	Р
Η	V	S	U	S	Ι	R	Q	Η	E	D	E	Ο	J	L	U	S	Ι	Ζ	Р
Ν	Ι	Q	Η	W	U	W	Ο	R	Χ	D	Y	R	С	G	L	Α	Ν	А	Ζ
Ο	Κ	E	Ν	Т	С	S	Ζ	С	Ζ	Α	G	J	А	W	D	Α	S	R	Y
U	L	Μ	В	D	Κ	G	Η	В	Ζ	W	Р	S	В	Ο	J	Р	В	D	Q
L	G	L	D	A	L	Α	E	R	E	С	R	Р	S	Т	Y	В	0	Q	С

Agriculture Archeology Arrowhead Ballcourt Beans Corn Coyote Hohokam Jewelry Juniper Kiva Lizard Macaw Mano

Mesquite Metate Mogollon Pithouse Pottery Prickly Pear Pueblo Raven Roadrunner Ruins Saguaro Salado Shell Sinagua Squash Tortoise Turquoise Yucca

Casa Grande Ruins NM

Search, Find, and Name: Search for the following three items. When you find them, write down their names on the lines beneath each photograph.







The third item above is used for a traditional event that still occurs in this desert today. Are there any similar traditions in your culture? In your family?

Who may have lived in the Casa Grande?

Where could they have migrated from?

Who might be their descendants?



Then and Now:

What differences can you spot between the two photographs?

Circle the cactus that has grown the most arms between 1961 and 2011. How old do you think these cacti are?

Did you know...? Saguaro cacti can take up to 75 years to grow arms!













What did the Chiricahua Apaches do with the first object? What do you have and use today that has the same purpose?

In the evenings, the Civilian Conservation Corps men stationed here in the 1930s would relax after a long day's work by attending classes, playing games, and writing letters to their families back home. What do you do for fun and entertainment at home?





Animals have special tools that help them survive in the areas where they live. For example, the desert is hot and dry, the arctic is cold, or along the coast there can be high winds and salty air. These special tools are called adaptations. Design your own Chiricahua animal. What adaptations will your animal need to find food or escape predators? How will your animal conserve water or survive the hot summers and cold winters? Use the examples to get you started.

My animal is called:

It looks like:



Skunks can release an unpleasant odor when threatened by other animals or people.



The coati's long nose and strong claws are good digging tools for finding food.





When looking at the objects above, what do you think the purpose of the Coronado expedition was? Why were members of the expedition carrying weapons and amor?

Who was on the Coronado expedition?:
How many people?
Where were they from?

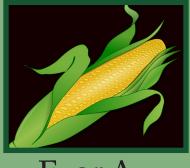
What did they bring?



Members of the Coronado expedition were the first Europeans to travel through this area nearly 500 years ago. They encountered indigenous peoples who had been living here for many, many years. The meeting of these different cultures changed the lives of both groups. We can still see these changes today in the food we eat and the things we do. The objects below came from either Europe or from the Americas. Pick and circle either E or A for Europe or Americas.



E or A



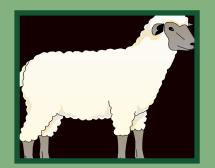
E or A



E or A



E or A



E or A



E or A









What was the second item above used for? What else were they made from?

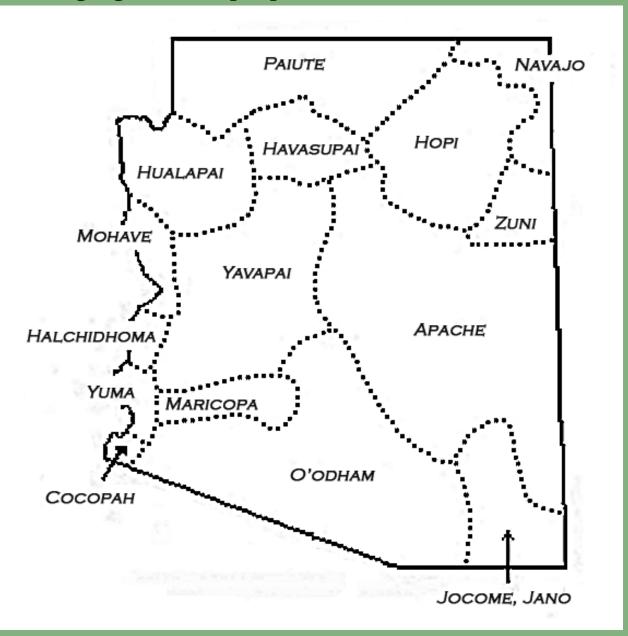
What tribe of Apaches were in conflict with Fort Bowie?

The Butterfield Overland Mail Company was the first transcontinental mail service in the U.S. How long did it take to travel from St. Louis to the end of the route in San Francisco?

What year was Fort Bowie abandoned? Why was it abandoned?



Many people do not realize that there were and are many American Indian Nations within Arizona. Each had their own way of life and their own language. Color or shade the map below if you have heard the language of these people.











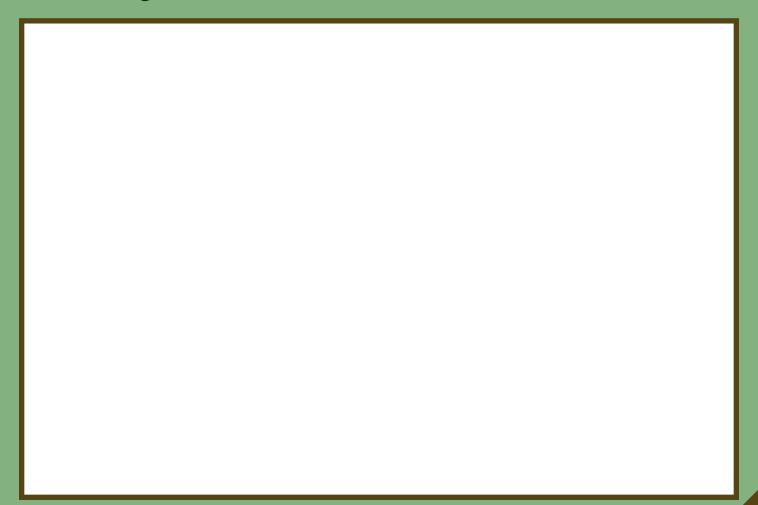
What do you think these things are used for? Why would you choose to bring these items with you?

Visit the new virtual museum at www.nps.gov/features/lake If you were going on a trip in the Mojave Desert and along the Colorado River, what would you take with you today on your trip? Remember you will be on the water and land.

Why is it important to preserve these clues, stories, and places for the future? How can I protect them?



If you could design a boat what would it look like? Draw your boat below and give it a name.



Montezuma Castle NM

Search, Find, and Name: Search for the following three items. When you find them, write down their names on the lines beneath each photograph.







Life at Montezuma Castle was more than hunting and cooking– you can see this in items that people made, like those above. If you lived here, what would your job be? What local resources would you use to complete your job?

What culture occupied the Montezuma Castle cliff dwelling?

Why do you think they built the Castle so high up?

BONUS: Name three creatures only found in Montezuma Well



Road-Trip Scavenger Hunt: As you're driving between the parks and monuments, try to find the following things:.

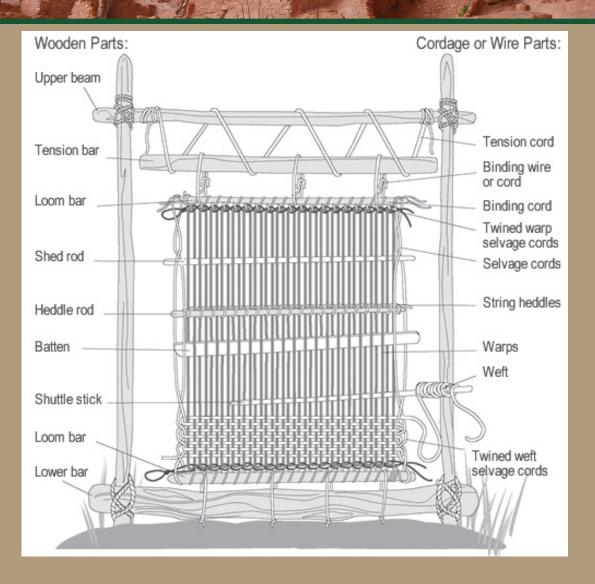
Airplane
Truck
Farm
Waterway (Canal, River, or Stream)
Bridge
Telephone Pole
Livestock

How did the ancient people travel without things like a car, truck, or airplane?

How would life be different without electricity?_____

Montezuma Castle's inhabitants were very good farmers. Do you recognize any ideas that farmers today borrowed from them? How are farms different today?

Navajo NM



Look for the loom and see if there is a weaver in the visitor center today. What colors are most common in Navajo rugs and blankets?

What materials are used to make the rugs and blankets?

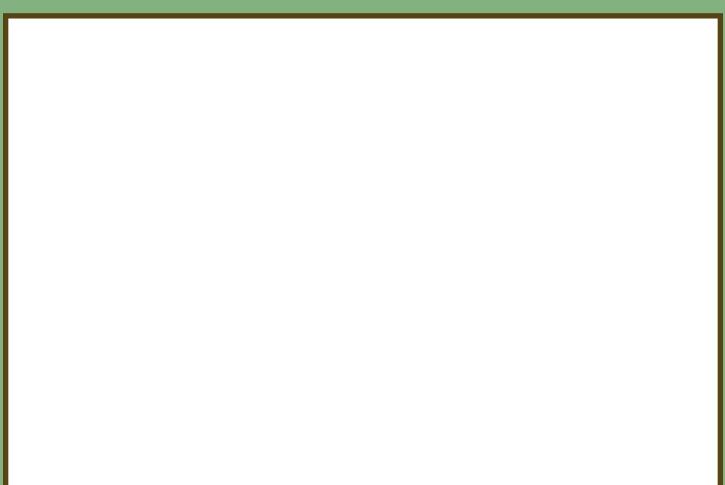


Petroglyphs and Pictographs: Archeologists sometimes find pictures of plants, animals, people, and other symbols carved and painted onto rocks. Some people think they are stories, ancient road signs, territory markers, or calendars. What do you think they could be?



There's a very good chance that the petroglyph on the left resembles a heron eating a frog or a toad, just as this green heron on the right is doing. In the box below, use a pen or pencil to draw a story of your own using pictures and symbols.













What do you know about the animal from the center photograph?

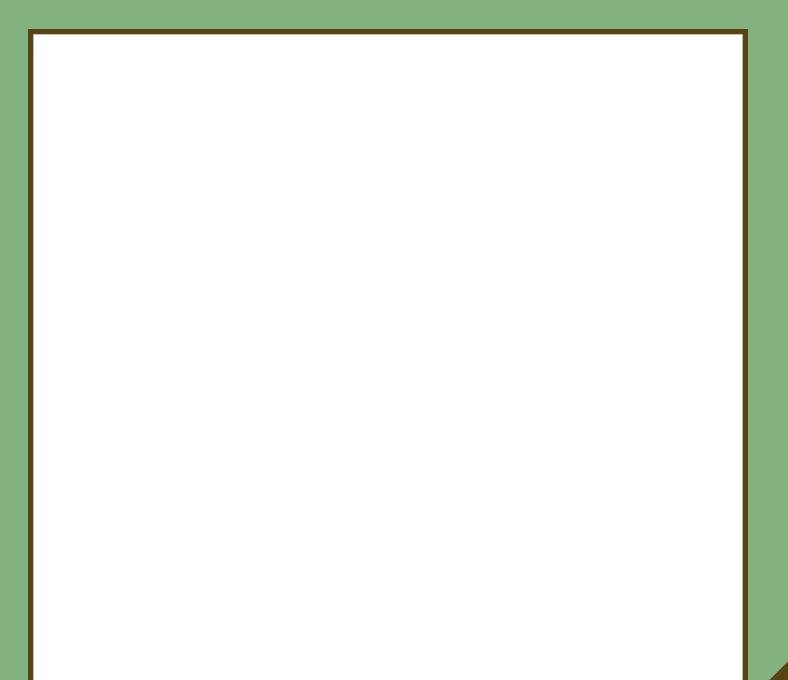
Who lived in the Sonoran Desert?

How were native plants used by these people?

The art of pottery making has been passed down for generations. What traditions does your family pass down?



Cattle brands were designed to symbolize a family name or the location of the ranch. Draw a cattle brand for your family.



Petrified Forest National Park

Disappearing Act: Petrified Forest used to have a lot more petrified wood. Where do you think it went? Petrified wood isn't the only thing people like to collect. People used to dig holes and even use dynamite to explode the walls of ancient buildings so that they could find artifacts like arrowheads and pots. Today, archeology sites are protected so that people can't loot, or illegally take, artifacts from them.

Find a park ranger and ask them how many people visit the Petrified Forest each day.

A. _____

If each visitor took just one tiny piece of Petrified Wood, how many pieces would be taken in a year?

The answer you had for part A. multiplied by 365 days = B. _____

That's a really big number!



Which of these two pieces of Petrified Wood has been agatized and which has been permineralized?





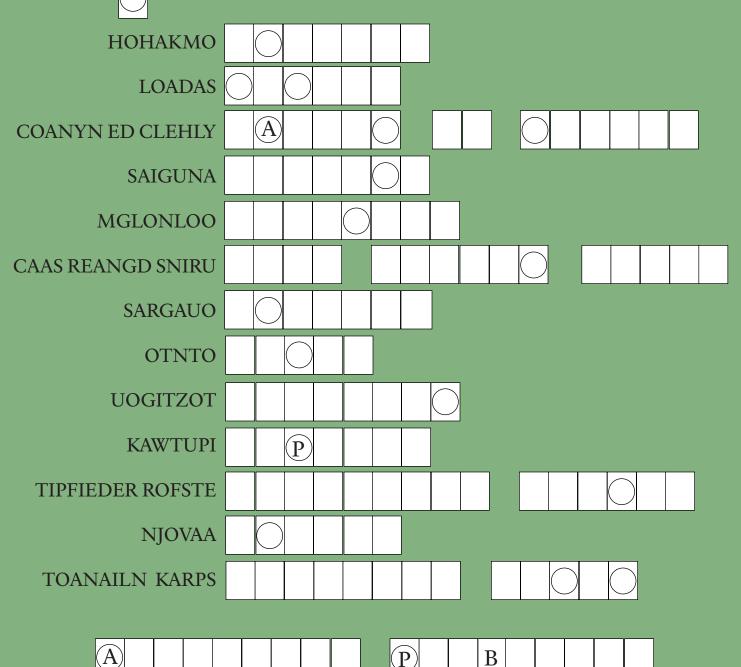
People from which culture lived in Puerco Pueblo?

What kinds of crops did the people living in Puerco Pueblo grow?_____

What was the climate like 225 million years ago? Hot or cold? Dry or humid?_____

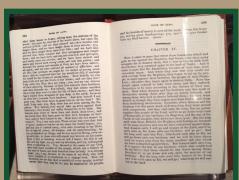


Double Word Puzzle: Unscramble the clue words in the left column and use the lefters found in boxes to solve the mystery words at the bottom.











The Kaibab Paiute Indians designed the first object to make a very specific noise. What sound does this instrument make?

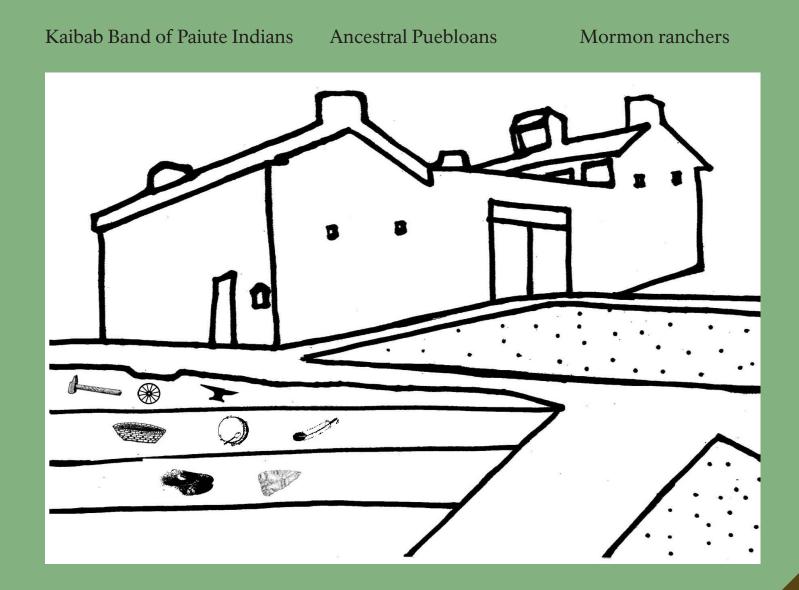
Why did the first white settlers establish an outpost at Pipe Spring?

What was carried and supported by the third item?

Why is Pipe Sring important to both the Kaibab Band of Paiute Indians and member of the Church of Jesus Christ of Latter Day Saints?



Winsor Castle was built on top of a site that has been used by different cultures for thousands of years. Older artifacts from these cultures are often buried deeper in the soil than younger artifacts. Draw a line from the name of the group of people who created each set of artifacts to the things they left behind.



Saguaro National Park

Draw Your Own Saguaro: Hike one of the many trails in Saguaro National Park and find a young saguaro cactus shaded by its nurse plant. What do you think this saguaro will look like in 80 years? Draw whatever else you think will be around 80 years from now.

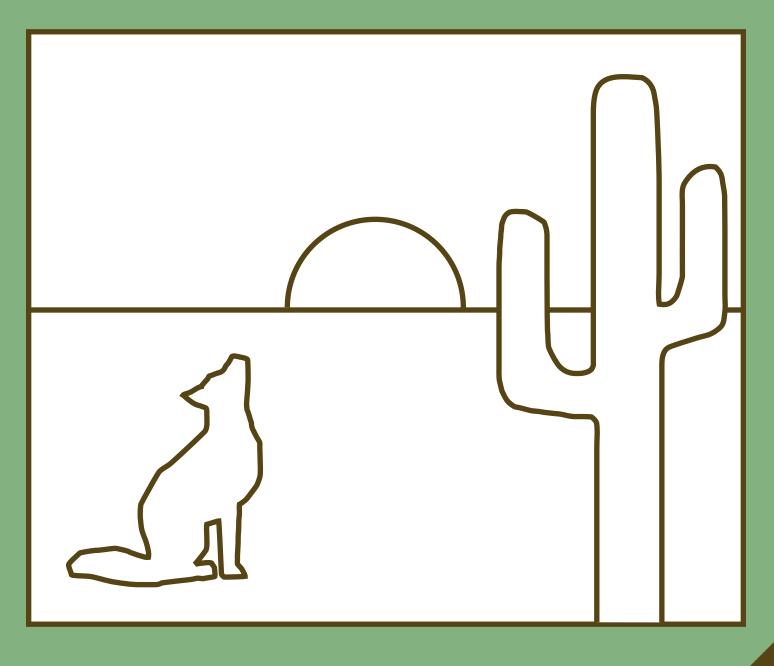
Who may have lived here and etched the petroglyphs in what is now Saguaro NP?_____

Why is a nurse plant necessary for the saguaro's survival?

Were Saguaros necessary for people's survival here? Why?



Sunset in the Sonoran Desert: Coyotes aren't the only nocturnal animals in the Sonoran Desert. Color in the picture and draw any other nighttime features!



Sunset Crater Volcano NM

Search, Find, and Name: Search for the following three items. When you find them, write down their names on the lines beneath each photograph.







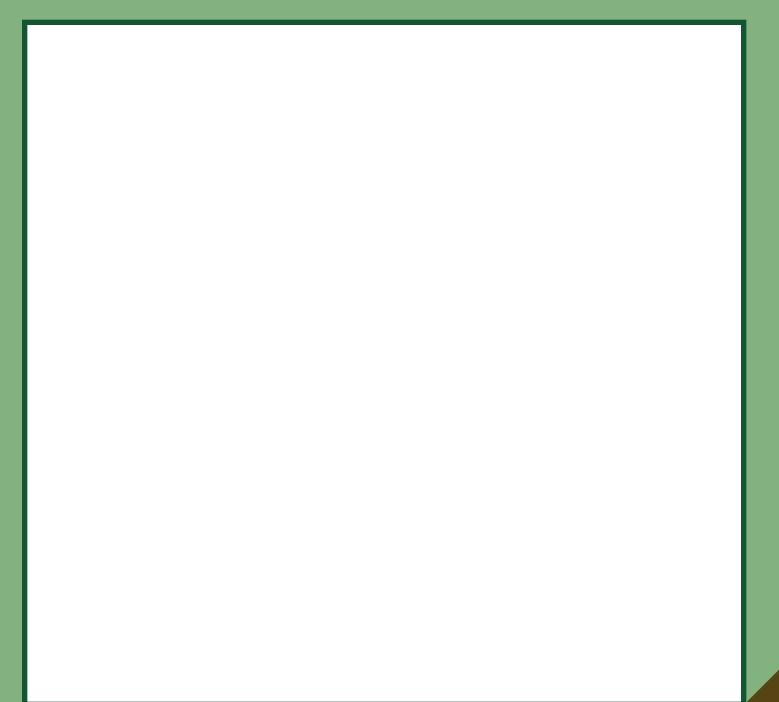
How do you think the second item was made? What do you think it was used for?

What is the third item made out of? What was it used for?

Can you find and name three other artifacts that you find in the visitor center that are made out of the same material as the last item?



What do you know about volcanoes? Do you know there are different types of volcanoes? Draw your favorite kind of volcano!











What was the second item above used for? What are some things you can think of that people use stones for now?

What culture occupied the cliff dwellings at Tonto NM?

What other cultures could have influenced life in the Salt River Valley?

Other than food, what is made from plants and how are plants used today?



Cactus Patch Trail: Follow the Catus Patch Trail to the parking lot after visiting the pueblos and search for the answers to the following questions on the signs along the trail.

1.) What are two other common names for catclaw acacia (Acacia greggii)?

2.) Why was the agave (*Agave chrysantha*) called the century plant?

3.) The _______ is Arizona's state flower.

4.) The *Opuntia* ______ grows farther north than any other cactus.

5.) The ______ cholla (*Opuntia fulgida*) produces fruit that never ripens.

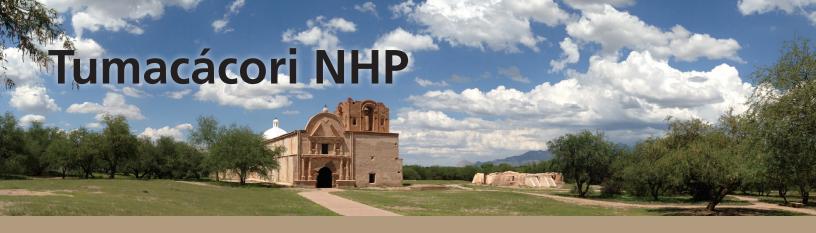
6.) ______ *acanthodes* has a tendency to lean toward the south.

7.) Which cactus looks like collections of 2-12 upright, spiny cucumbers?

8.) The ______ cactus (*Mammillaria microcarpa*) often produces a large halo of pink flowers early in the summer.

9.) If you were the first person to ever see the saguaro cactus, what would you name it?

Did You Know? Every plant and animal has both a common name, and a scientific name. While an organism can have many common names, it can only have one, unique scientific name. The Catclaw Acacia has at least three common names. It's a part of the genus (a group of similar organisms) "Acacia" and has the species name "greggii," which together make up its one and only scientific name, Acacia greggii. Can you find two cacti on this page which are part of the same genus?









Look closely at item number three. What was it used for? What would you use to do the same thing today?

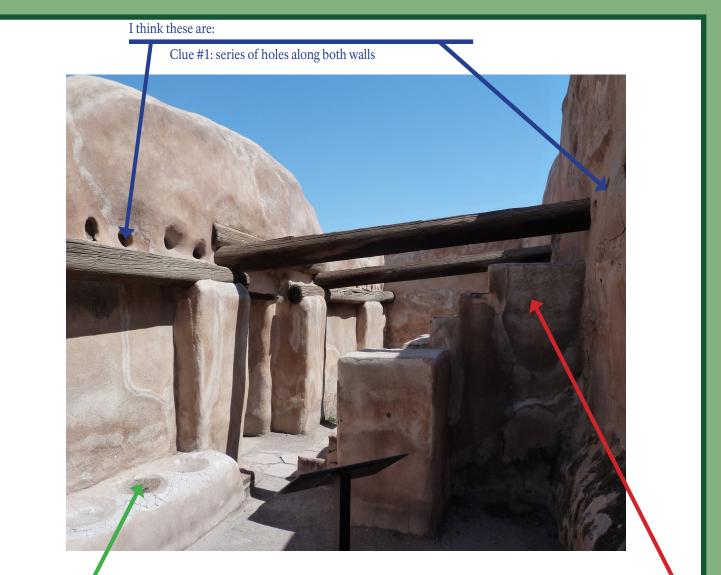
The people who lived here for hundreds of years before it became a mission called themselves ______, which means "people" in their language. They still live nearby today.

The first person from Europe who came to visit Tumacácori decided that it should become a mission. His name was

Everyone needs to eat! Find something in the park that the people who lived here would have eaten, or used to make food. _____



Archeologists use photographs and drawings to help them figure out how a building used to look. They also look at similar places and make educated guesses about what used to be there. Look at this photograph and make your best guess for what each thing is.



I think these are:

Clue #2: circular dents in low bench

I think this is:

Clue #3: staircase to nowhere?









The second item above served a very important purpose, especially in a desert environment. Do you have anything with you that serves a similar role today?

What else can people make out of yucca?

Why did the people of Tuzigoot choose to live in the Verde Valley? Hint: what might the Spanish word "verde" mean?

What does "Tuzigoot" mean?



Building a Home: Centuries ago, ancient people in Tuzigoot built their homes from many different local resources. Some were built from volcanic river rocks and mortar, others were constructed using wooden poles and many layers of a sticky mud. How would you have built your home if you lived 800 years ago? Using the building materials of the past, imagine how you would have built your house and draw it below.











trees and shrubs

thick grasses

stone

clay

animals



Settled Spaces

One thing archeologists study is the way people use space. The people who lived at Walnut Canyon made very good use of their space.

How many rooms does your house have?	A
How many people live at your house?	B
How many rooms can you count on the Island Trail?	С
How many people do you think lived here at once?	D

Using these numbers, help an archeologist determine how people used space then and now!

A divided by B = _____ rooms. (how much space you use)

C divided by D = _____ rooms. (how much space the Sinagua may have used)

What kind of homes did people have at Walnut Canyon?

What resources make Walnut Canyon a good place to live?

What materials were used to build these homes?



BINGO! There was a Farmer had a Dog Macaw: During your travels, what items did you see that ancient farmers in Arizona used, harvested, or created? What is used by today's farmers? Does it look the same?

Pit House	Obsidian Point	Cattle	Apple Orchard	Corn
Sandals	Gun- powder	Kiva	Metate	Yucca Rope
Cliff Dwelling	Hay Bales	Stone Axe	Dinosaur Bone Awl	Steel Knife
Mesquite Beans	Cotton Bag	Shaft Straightener	Irrigation Canal	Olla
Salt	Wooden Barn	Storage Basket	Digging Stick	Horses









What could this first item have been used for, both before and after it was formed into a disc shape?

Who lived in the Wupatki Pueblo?

Did people settle here before or after the nearby Sunset Crater Volcano's most recent eruption?

Notice the many plants along the trail. Find one way native people use one of these plants.



3

6

4

2

7

10

8

5

The Archeologist's Crossword Puzzle:

Across:

- 4.) I'm the tallest cactus in the Southwest
- 6.) Some people call me corn
- 9.) A Great Big House
- 10.) Used with metate to grind corn

Down:

- 1.) A dry, hot place without much water
- 2.) Grown for food; dried gourds can be used to hold seeds or flour
- 3.) A sacred room, where men gather to perform ceremonies
- 4.) Taken from the ocean, used to make bracelets and other jewelry
- 5.) Explore Learn ?
- 7.) Another name for the century plant
- 8.) I look like a furry pig, some people call me a peccary
- 10.) I'm a bird with bright red, blue, and yellow feathers

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NATIONAL PARK SERVICE

Congratulations!

As a National Park Service Junior Ranger, you are part of a rich tapestry of people who are working very hard to protect the last of our wild places and sites that are important to our history. Thank you for helping your national parks preserve our natural and cultural resources so that future generations can enjoy them too!

Continue to Explore, Learn & Protect...

...At Parks: Remember to ask about the Junior Ranger program each time you visit a National Park.

...Online: Ask a Park Ranger about how to access the Web Rangers Program to virtually explore what the National Park Service has to offer.

...At Home: You can make a difference every day! Think of ways to help your family, friends, school, or community. You could plant a garden, collect plastic bottles to recycle, or learn and share the history of an important place.

You have now completed the National Park Service Junior Arizona Archeologist program. Please mail in the awards copy of your completed stamp page to receive a very special Junior Arizona Archeologist patch!



For more information about this program, other special programs for kids, or Arizona's national parks you can contact:

Southern Arizona National Parks Office 3636 North Central Avenue, Suite 410 Phoenix, AZ 85012









www.everykidinapark.gov

Western National Parks Association