MAGS EXPLORER

Memphis Archaeological and Geological Society Youth Newsletter

December 13, 2002 • Volume 1, Number 2

Zuni heritage is preserved

in the fine craftsmanship of their turquoise and silver jewelry, in the great designs of their dance masks and in the wealth of ceremonial observations. The Zuni Indians have a creative spirit which brings beauty to their desert home.

The Zuni now live in an area along the Zuni River, south of Gallup, New Mexico. Their old home was a terraced, stone and adobe pueblo on a hill overlooking the river. Originally they lived as farmers, raising corn, beans, squash and chiles. During the last hundred years, or so, Zuni Indians has developed skills as jewelry makers, and are now famous for their work.

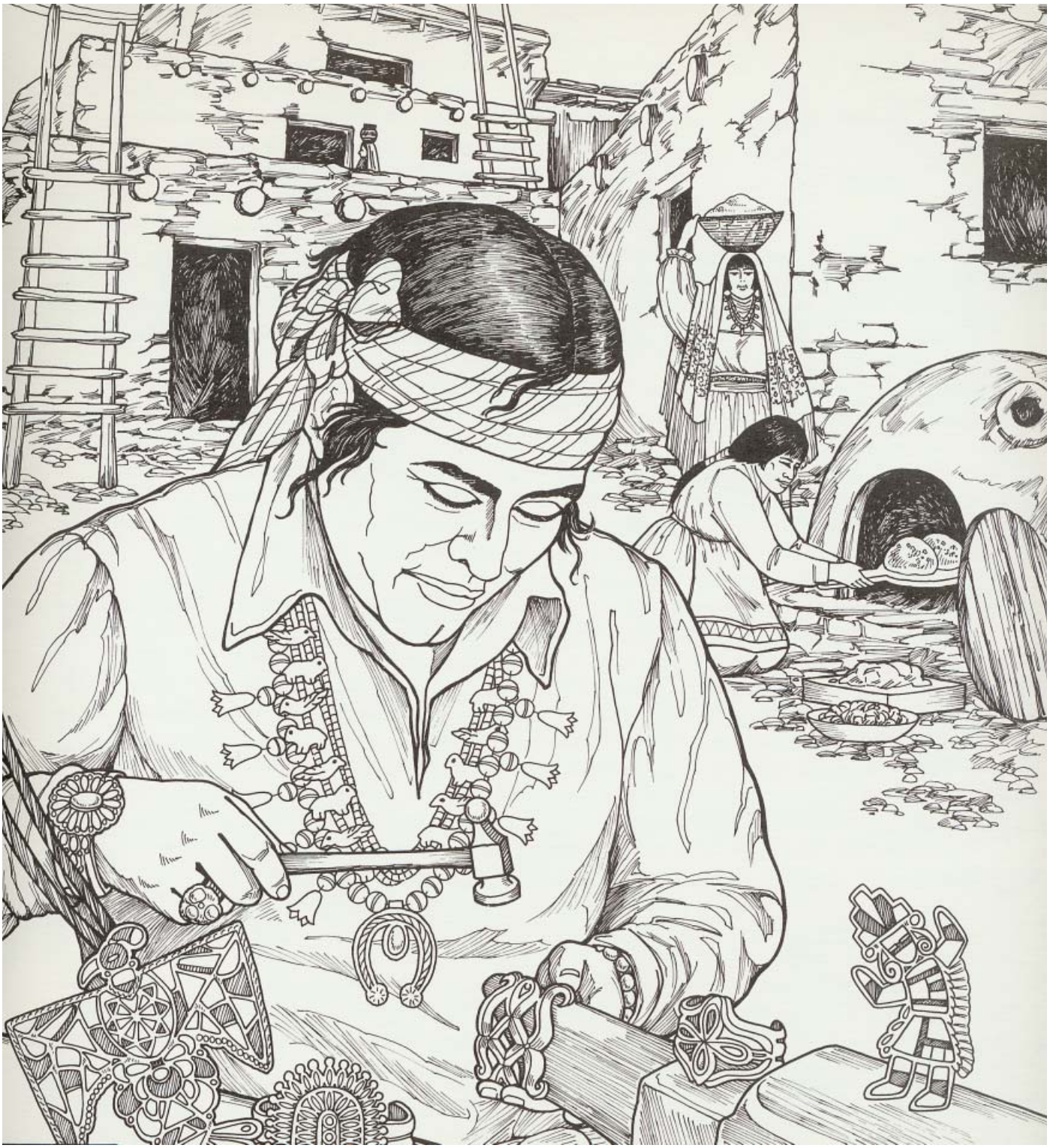
©1978 Troubador Press

Zuni use a variety of jewelry designs [deer, butterflies, eagles, dance figures in flat relief and more] in which turquoise stones are individually set or arranged in mosaics. Different colors of stones, shell and coral pieces, delicately elaborate designs and silverwire trim set Zuni jewelry apart from other jewelry makers. Jewelry making has joined agriculture as important ways of making a living.

Religious dances were a big part of Zuni life. Dances were held often throughout the year, except during planting and harvest seasons. Masks were a vital part of these dances. The Zuni were known for their skillfully made masks, their imagination in mask design, and the huge variety of masks constructed. Zuni masks were bizarre, often grotesque, and brightly painted. Many Zuni masks were very large. Masks used for the Shalako festival after the harvest were as much as nine feet high and totally enclosed the men who danced inside them. Preparations for this festival lasted all year. The Shalako dancers wore enormous masks with eagle-feather headdresses, turquoise faces, clacking beaks, and raven feather accents.

MAGS Explorer is published monthly by and for the youth members of the Memphis Archaeological and Geological Society. Please send your comments and articles to Editor Mike Baldwin, 367 N. Main St., Collierville, TN 38017 or rockclub@earthlink.net. Youth can give articles, artwork, poems, puzzles, experiments, or stories to co-editors Jennifer Baldwin, Emily Randolph, Kelly Baldwin, or Abbey Randolph.

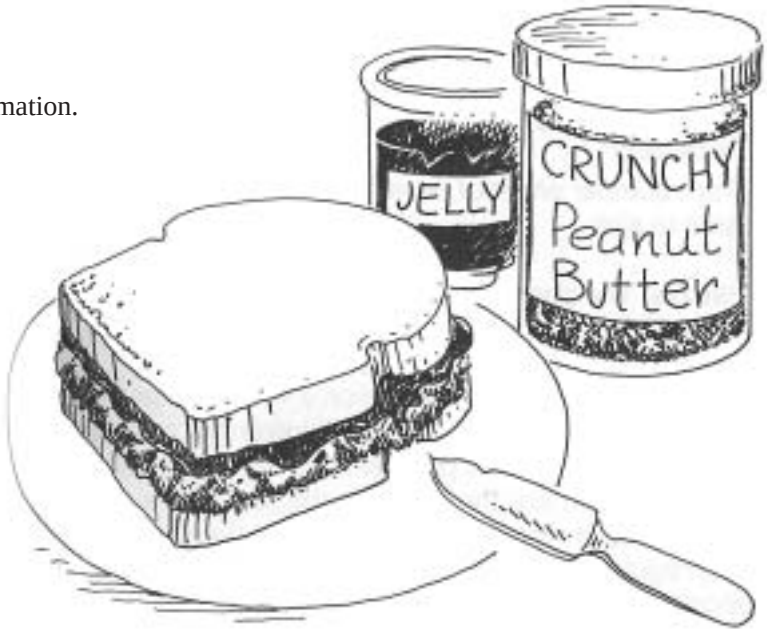
COLORING PAGE



ZUNI Indians are famous for their work in turquoise and silver.

EARTH SCIENCE EXPERIMENT

SEDIMENTARY SANDWICH



Purpose: To demonstrate a sedimentary rock formation.

Materials: 2 slices of bread
crunchy peanut butter
jelly
knife, for spreading
plate

Procedure: Do this before lunch.

[1] Lay one slice of bread on a plate.
[2] Use the knife to spread a layer of peanut butter on the slice of bread.
[3] Add a layer of jelly on top of the peanut butter layer.
[4] Place a second slice of bread on top of the jelly layer.
[5] Eat the sandwich.

Caution: Never taste anything in a laboratory setting unless you are sure that there are no harmful chemicals or materials. This experiment is safe.

Results: A sandwich with a series of layers has been constructed.

Why? Sedimentary rocks are formed from loose particles that have been carried from one place to another and redeposited. These rocks usually are deposited in a series of layers similar to the layers in the sandwich. Each layer can be distinguished by differences in color, texture, and composition. The oldest layer and lowest bed is deposited first and the youngest layer is at the top. The layers over a period of time become compacted and cemented together to form solid rock structures.

STAUROLITE

Staurolite can be red, white, brown or black colors.

Turn the page and cut out the Staurolite Specimen Card for your collection.

Janice VanCleave, Earth Science For Every Kid: 101 Easy Experiments That Really Work; John Wiley and Sons, Inc.; New York New York; 1991. Reprinted for educational purposes under the "fair use" provision of the United States Copyright Act of 1976.

JUNIOR ROCKHOUND OF THE YEAR AWARD

You could be the 2002 "Junior Rockhound of the Year"! Pick up your application from Mike Baldwin tonight and "Go For It!" You will never know unless you try. The deadline for entry is December 31, 2002, so don't wait, do it today! Send your application to George and Rena Everett, 69 Jeff Street, Oxford, MS 38655.

GEOLOGY CHALLENGE

Where river meets sea

An estuary is an area formed at the mouth of a river where river currents interact with ocean tides. Estuaries can be formed in many ways. Some, like the Chesapeake Bay, were formed when the ocean level rose after the last ice age. When this occurred, seawater swamped the river system. An estuary can also form in places where the continuous action of waves builds sand up across the mouth of a river and traps river water behind it. The Waddensee estuary in the Netherlands is an example of this kind of estuary. A third type of estuary is the fjord, which is common in Norway and Alaska. Fjords are created when rivers end in deep areas of water that are partially isolated from the sea. This would be the case if a rock formation provided only a small or shallow opening to the sea for the river. Another way in which an estuary can form is when an earthquake or volcano creates a low-lying area in a coastline and there is only a narrow opening to the sea, such as the San Francisco Bay.

CHECK IT OUT

Estuaries can be created by:

[a] the formation of a depression in a coastline caused by an earthquake
[b] the drowning of a river valley by the rising sea level
[c] the buildup of sand across the mouth of a river
[d] all of the above

Michael Bentley, High School Review: Earth Science; Princeton Review Publishing, L.L.C.; New York New York; 1998.
Reprinted for educational purposes under the "fair use" provision of the United States Copyright Act of 1976.

January Program

Bring your favorite mineral or fossil to show everybody.

Have you thought of a name for the MAGS Youth yet. We need a name, so put your thinking caps on and write down a few of your ideas. Bring them with you to the January meeting. 14 MAGS Youth went on the Birmingham Ridge Field Trip and we had a great time!

NOTES FROM THE MEETING

Name:	Staurolite $FeAl_4Si_2O_{10}[OH]_2$
Class:	nesosilicate
Hardness:	7-7.5
Fracture:	conchoidal
Streak:	white
Crystals:	monoclinic
Location:	Proctor Farm, Georgia

This is your newsletter. Put your name on it, and take it home with you.

Your Name _____

1. What is the name of the December Specimen-of-the-Month?

   _____

2. Cut out the specimen card and put it with your mineral specimen.

3. Write down the names of the MAGS officers elected tonight.

   _____

   _____

   _____

   _____

   _____

The answers to the question in Geology Challenge is D