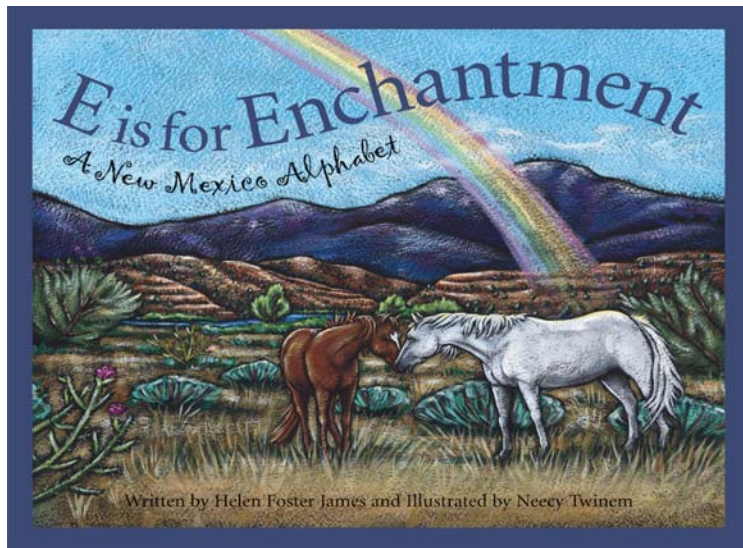


Teacher's Guide



E is for Enchantment: A New Mexico Alphabet

Guide written by
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State Symbols

What are the symbols that make New Mexico special? *E is for Enchantment* is one place where you can find these official symbols. You'll need to search throughout the book for the answers. Start your search!

1. State flower _____
2. State vegetables (2) _____
3. State animal _____
4. State tree _____
5. State gem _____
6. State insect _____
7. State bird _____
8. State languages (2) _____
9. State cookie _____

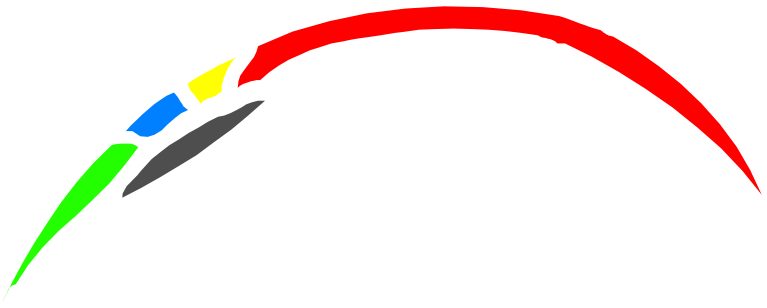
If you were able to add a symbol to New Mexico, what would you choose? Write a short paragraph explaining why you think your choice would be a good symbol for New Mexico.

The Mystery of the Anasazi

Who were the Anasazi and what happened to them? Find why these people were mysterious in *E is for Enchantment*.

Brainstorm all the possible reasons you can think of that the Anasazi left the New Mexico area.

Choose your best reason and write a detailed paragraph explaining why they left and where they went.



The Art of Carlsbad Caverns

New Mexico is the home of one of the world's largest cave systems, Carlsbad Caverns. These caves were discovered by a cowboy in 1901. *E is for Enchantment* will tell you what the cowboy saw that led him to his discovery. What type of formations are in a cavern?

Project A class mural of the inside of a cavern.

Materials

a long sheet of black bulletin board paper

white crayon or chalk

yellow or lime-green crayon or chalk for accents and highlights

Divide the students into small groups.

Give each group of students a part of the cavern to design.

Discuss how the mural needs to flow from one group to the next.

Discuss what might be found in a cavern.

Hang finished mural on wall or bulletin board.

Follow up with students evaluating their group work on the project.

Discuss how in the real world teams have to work together to complete a large project.

Water is Precious

New Mexico is a state that receives very little rainfall. How does this affect the people who live there? Learn more about New Mexico and some of the ways people use landscaping in their effort to conserve water in *E is for Enchantment*.

1. Why is it important to conserve water?

2. How can you conserve water at school?

3. List all the ways you can conserve water at home.

4. What does your town do to encourage people to conserve?

Grow Your Own Crystals

The White Sands National Monument is a desert made of gypsum crystals. Discover more about this unique desert in *E is for Enchantment*.

Grow your own crystals with one of the following recipes.

Sugar Crystals

Materials

sugar (2 tbsp)
clear plastic cup
hot water
pencil
string

Directions

1. Pour 1 ½ inches of hot water into cup.
2. Stir sugar into water until all the sugar is dissolved.
3. Tie a piece of string onto the pencil. The string should hang just above the bottom of the cup.
4. Put the cup in a place away from heat. Leave for several days.
5. Write down your observations each day.
6. Draw an illustration showing your crystals.

Try the same procedure using rock salt.

Compare the crystals. How are they alike? How are they different?

Try a different type of crystal.

Compare the crystals and discuss the differences.



Coal Crystals

Materials

tin pie pan

50 ml salt

coal or charcoal pieces (coal works best)

food coloring

100 ml water

50 ml laundry bluing

10 ml ammonia

Directions

1. Pour salt into pan.

2. Place coal on salt.

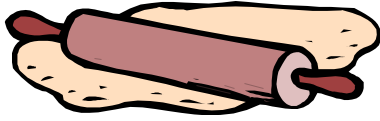
3. Place drops of food coloring on coal. Be creative with your colors!

4. Mix water, bluing, and ammonia together. Pour the mixture over the coal.

5. Put in a warm place.

6. Watch the crystals grow.

7. Compare to salt and sugar crystals



Fry Bread's a Favorite!

FRY BREAD

Ingredients:

- 4 cups flour
- 1 tbsp. baking powder
- 1 tsp. salt
- 2 tbsp. powdered milk
- 1 ½ cups warm water
- 1 cup shortening

Directions: (with teacher or adult supervision)

1. Put 4 cups flour in a bowl.
2. Add 1 tbsp. baking powder and 1 tsp. salt.
3. Add 2 tbsp. powdered milk.
4. Mix all together.
5. Pour in 1 ½ cups of warm water.
6. Knead dough by hand until it is soft but not sticky.
7. Cover with a clean cloth and allow to stand for 15 minutes.
8. Shape into balls about 2 inches across and then flatten by patting and stretching the dough with the hands and fingers until the dough is flat and round, or it may be rolled out using a rolling pin.
9. Melt 1 cup shortening about an inch deep in frying pan. Make sure the grease is hot before placing the dough in. Fry one side, then turn. Fry bread until it is golden brown on both sides.

Make Your Own

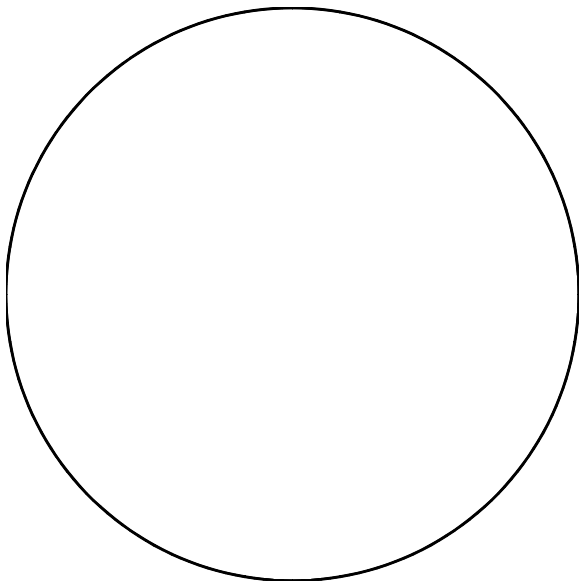


Native American jewelry is very popular in our country. Learn more about this art form in *E is for Enchantment*. Silver and turquoise are the materials often used in this jewelry.

Let's try making our own pendant.

Directions:

1. Cut the circle out on cardboard or tag board.
2. Carefully cover the circle with 2 or 3 layers of aluminum foil.
3. Make sure the foil is nice and smooth.
4. Use a Popsicle stick or dull pencil to draw a design on your pendant. If you tear the foil, just take a layer off and replace it with a new layer.
5. Use a paper punch to punch a hole near the top center of your pendant.
6. String a dark cord, string, or yarn, through the hole.
7. Proudly wear your pendant.





Los Alamos Jobs

What is Los Alamos? Why is it famous? Discover what place Los Alamos holds in history in the book *E is for Enchantment*. Los Alamos provides many jobs that help support the economy of New Mexico. Its scientists do research in bioscience, energy, environment, national defense, and space.

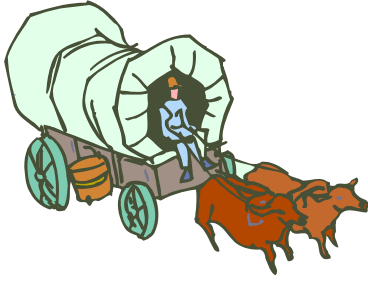
Brainstorm all the different jobs that are needed in the following areas:

Environment

Space

List three possible consequences to the economy of New Mexico if Los Alamos closed down.

- 1.
- 2.
- 3.



My Pioneer Journal

Imagine you have been traveling from Pennsylvania in a wagon with your family. You just arrived at a strange rock in the West. Read about Inscription Rock in the book *E is for Enchantment*.

Write in your journal describing some of the messages you found on the rock. Then describe the message you left for future travelers.

_____ 's *Journal*

Mapping New Mexico

Place the following on the map of New Mexico:

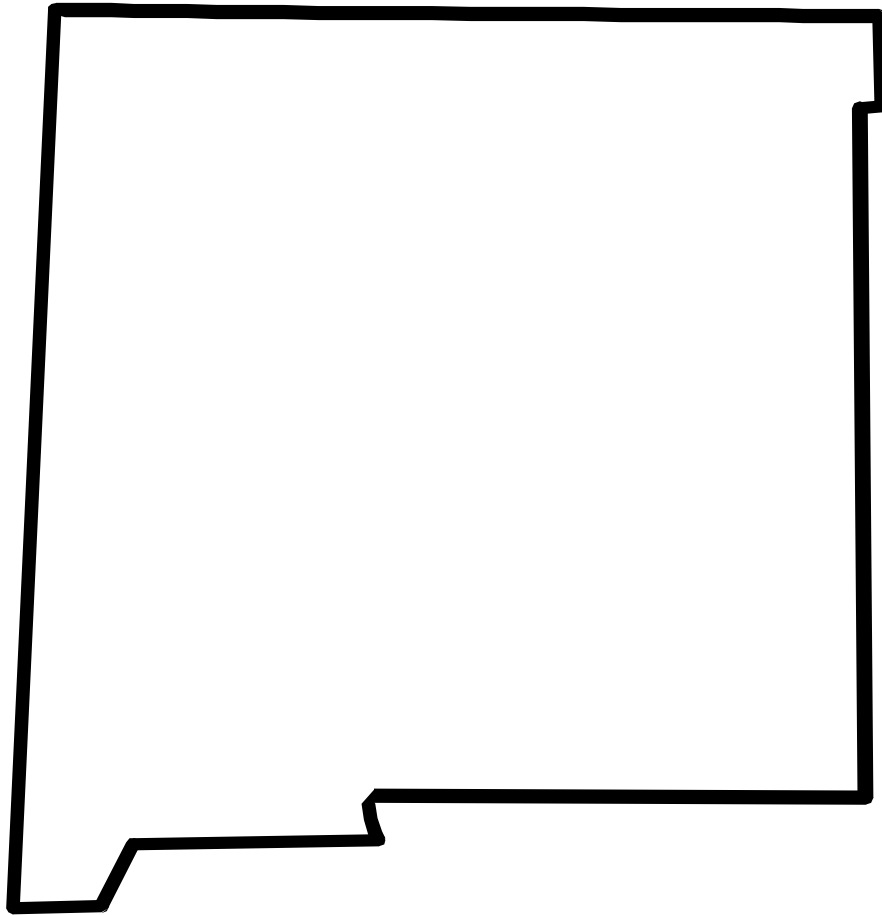
States that border New Mexico

Country that borders New Mexico

Rio Grande River

Albuquerque

Santa Fe



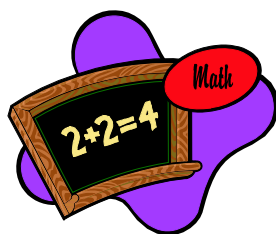


We Helped Make New Mexico

New Mexico has a very long history. Many people have helped to make it the great state it is today. You can find the answers to the following matches in the book *E is for Enchantment*.

Match the person with their accomplishment

- | | |
|--------------------------|-----------------------------------|
| ___1. Jim White | A. Created storyteller doll |
| ___2. Robert Oppenheimer | B. Spanish explorer |
| ___3. Maria Martinez | C. Created first atomic bomb |
| ___4. Paddy Martinez | D. Artist |
| ___5. Anasazi | E. Found uranium in New Mexico |
| ___6. John Chisum | F. Famous potter |
| ___7. Georgia O'Keeffe | G. Found Carlsbad Caverns in 1901 |
| ___8. Coronado | H. "Cattle King" |
| ___9. Helen Cordero | I. The "ancient ones" |



Math New Mexico Style

E is for Enchantment is full of interesting information about the people, places, and events of New Mexico. Enjoy reading this book and discovering New Mexico.

Try these math problems associated with New Mexico.

1. It takes 1,500 pine nuts to weigh one pound. If Jean picked 20 pounds of nuts in one day, how many nuts did she pick? _____

2. At the Albuquerque Balloon Festival, 700 balloons were launched. Of those, 526 balloons landed on the X at the finish line. How many balloons missed their mark? _____

3. Inscription Rock is 200 feet high. Karl climbed $\frac{3}{4}$ of the way up the rock. How many feet did he climb? _____

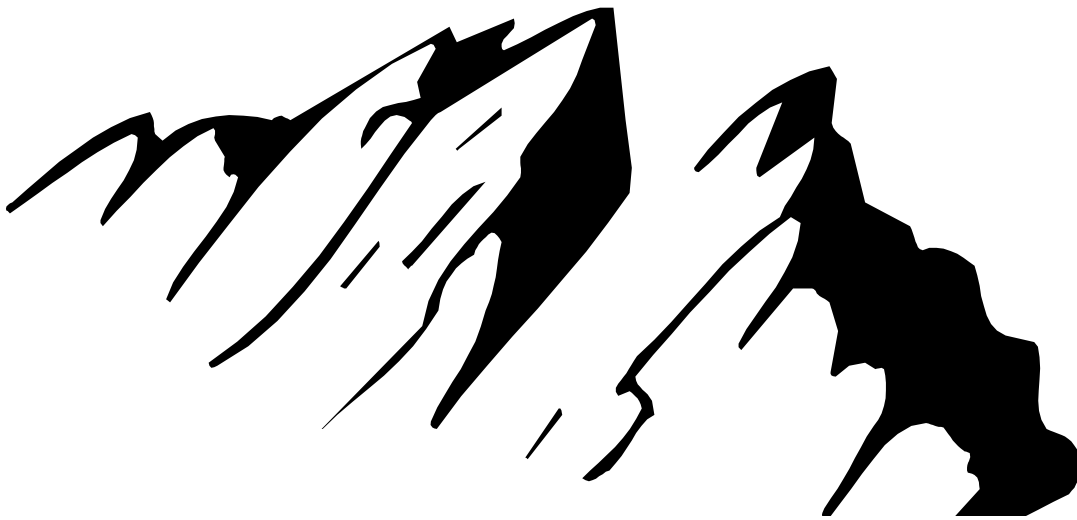
4. The Rio Grande flows through 1,900 miles of New Mexico. Robin and Tom took a river trip that started 965 miles from the beginning of the river. They finished at the New Mexico border. How many miles did they travel?



Petroglyphs for Tomorrow!

The word *petroglyph* means rock carving. Isn't it amazing how people hundreds of years ago left messages by carving pictures in rocks. Read about petroglyphs in the book *E is for Enchantment*.

Draw your own petroglyphs for future people to find. They should represent things you feel are important in today's world.



Write a paragraph explaining your petroglyphs.



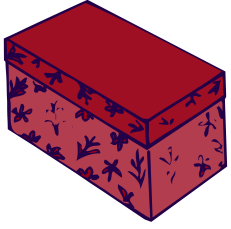
Everyone is Welcome in New Mexico!

New Mexico has so many wonderful historical and natural sights that it has been nicknamed “The Land of Enchantment.” You will be amazed as you read *E is for Enchantment* by all the wonderful places there are in New Mexico.

Using the information you read in *E is for Enchantment*, design a travel poster welcoming tourists to New Mexico.

Hints for designing a poster:

Center the letters of your title on the poster.
Make your letters LARGE and easy to read.
Fill your poster with your design.
Make it easy for the reader to understand.
BE CREATIVE AND HAVE FUN !!



Build a Class Pueblo

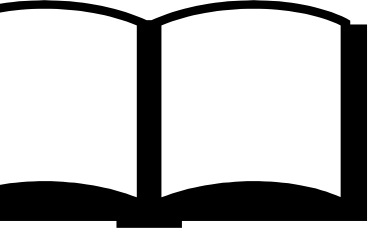
Pueblo villages were first seen by the Spanish explorers in the 1500s. Find the name of the Spanish explorer who visited Pueblo de Taos in *E is for Enchantment*.

Study the picture on the P page to learn what a pueblo looked like.

PROJECT-Build a Class Pueblo

1. Each student will need a shoebox with a lid. It helps to have different boxes of various sizes.
2. Cover the box with paper, or paint it the color of sandstone.
3. Cut holes in the center of the lid and on one side for windows.
4. Stack the boxes to form a pueblo.
5. Make ladders from sticks and place on pueblos.
6. Add beehive ovens on the outside.
7. Add people working (weavers, shepherders, cooks).

Discuss what the advantages and disadvantages were for this style of living.



My Storyteller Doll

Never heard of a storyteller doll? Learn about its creation in the book *E is for Enchantment*. What a good idea!

Now it's your turn to design your own storyteller doll. You'll need clay to make the doll. Draw your design idea below. Use the back of the paper if you need more room.

Write the story that your doll will tell.



RED or GREEN Survey

The chile is one of New Mexico's state vegetables. Do you know what a string of chiles is called? Find out in *E is for Enchantment*. A string of chiles is called a

_____.

Survey 30 students to find out which is their favorite chile—red or green.

Chile Survey

Red

Green

Use this data to make a graph showing your findings. Make sure your graph has a title and is colorful.

New Mexico Answer Sheet

Official New Mexico 1) yucca 2) chile, pinto beans 3) black bear 4) piñon 5) turquoise
6) tarantula hawk wasp 7) road runner 8) English, Spanish 9) biscochito

We Helped Make New Mexico 1) G 2) C 3) F 4) E 5) I 6) H 7) D 8) B 9) A

Math New Mexico Style 1) 30,000 2) 174 3) 150 ft. 4) 935 miles

Red or Green Survey ristras

Correlations to New Mexico Content Standards

6.30.2

6.30.2.16 - Social Studies

A. Unifying Concepts and Processes

We Helped Make New Mexico
Petroglyphs for Tomorrow
The Mystery of the Anasazi
Build a Class Pueblo

J. Productivity, Distribution and Consumption

Los Alamos Jobs

L. People, Cultures, Places and Environment

Mapping New Mexico
Water is Precious

N. Global Connections and Technology

Everyone is Welcome in New Mexico
Kokopelli Story
Pioneer Journal
Make Your Own Indian Jewelry

6.30.2.14- Mathematics

A. Unifying Concepts and Processes

Red or Green Survey
Math New Mexico Style