

Lesson
27

Mysteries at Cliff Palace

Cast of Characters

Narrator

Ruben

Rosa

Mom

Dad

Ranger Jenkins

Narrator: Ten-year-old Ruben, his older sister Rosa, and their parents are visiting Mesa Verde National Park in Colorado. They're with a group waiting for a ranger-guided tour of the cliff dwellings.

Ruben: Wow, this is going to be great! I'm going to solve one of the great mysteries of ancient North America, with the help of my trusty notebook!

Mom: Just look how many dwellings are built into the cliff alcove down there!

Ruben: All those walls and towers inside the ledge are really cool!

Mom: This was all built by the Ancestral Puebloan people.

Dad: That's right. These dwellings have been here about 800 years.

Ruben: I can't wait to see Cliff Palace up close. I'm sure I can find some clues to the mystery of why the people all disappeared.

Rosa: Right, Ruben. You can't even keep track of your lucky pen. So how can you solve a real mystery?

Ruben: Don't remind me, Rosa. I looked all over the car for it.

Dad: Hey, Ruben, here comes the ranger.

Mom: I bet she knows a lot about the Puebloan mystery.

Narrator: Ranger Jenkins arrives and introduces herself.

Ranger Jenkins: Gather round, everyone. We'll be descending 100 feet into the canyon. It's quite a trek, so be prepared.

Ruben: Aren't there five eight-foot ladders to climb?

Ranger Jenkins: It's challenging, but you can do it.

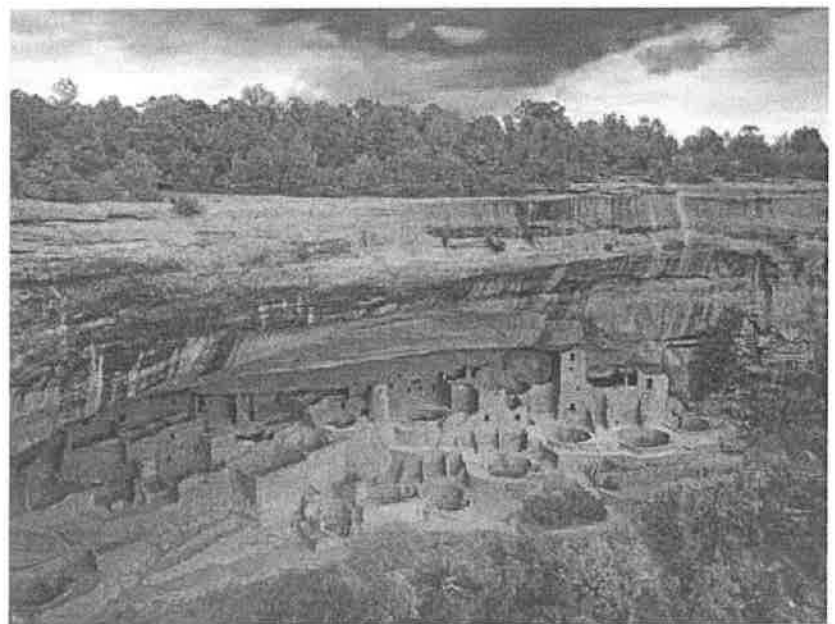
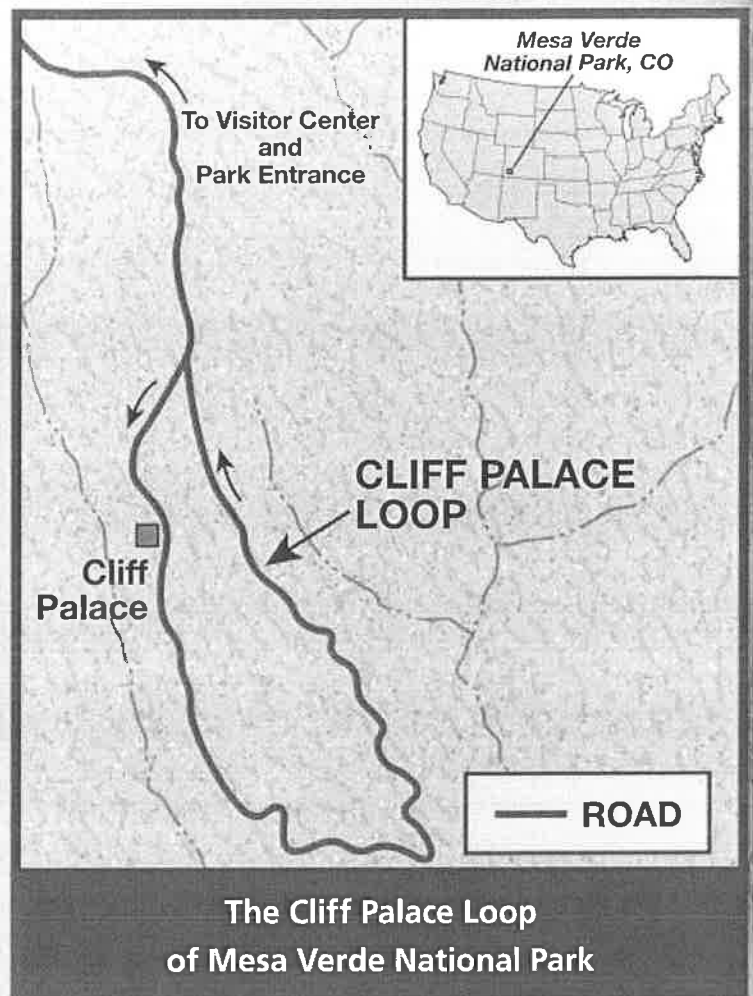
Rosa (to Ruben): I hope I can. It's so hot!

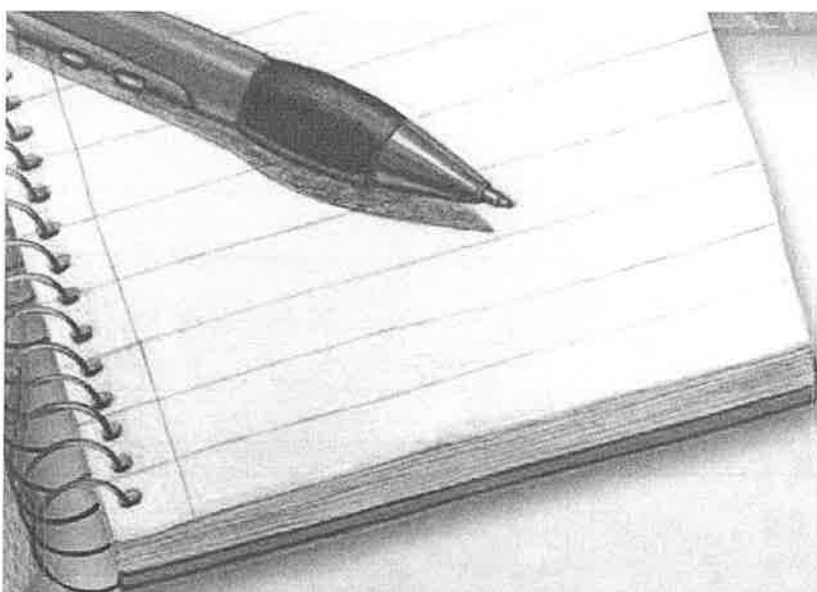
Ruben: I'll push you along if you need it. Just promise you'll tell me if you find any clues to the mystery.

Dad: Rosa, didn't you have a question for Ranger Jenkins?

Rosa: Yes! Why is this park named Mesa Verde? Doesn't that mean "green table" in Spanish?

Ranger Jenkins: Exactly! You see these huge, flat hills all around us? They're sometimes called plateaus. But they're as flat as tabletops, so they're also called mesas. And *verde* just refers to all the green plants and trees growing here.





Narrator: Ruben waves his hand urgently.

Ruben: I've been reading a lot about the Ancestral Puebloans who built these cities like Cliff Palace. I read that at some time they just left here, and I'm trying to figure out why.

Ranger Jenkins: Great question, Ruben. Historians have been puzzling over this mystery for a long time. I'd like to hear your ideas.

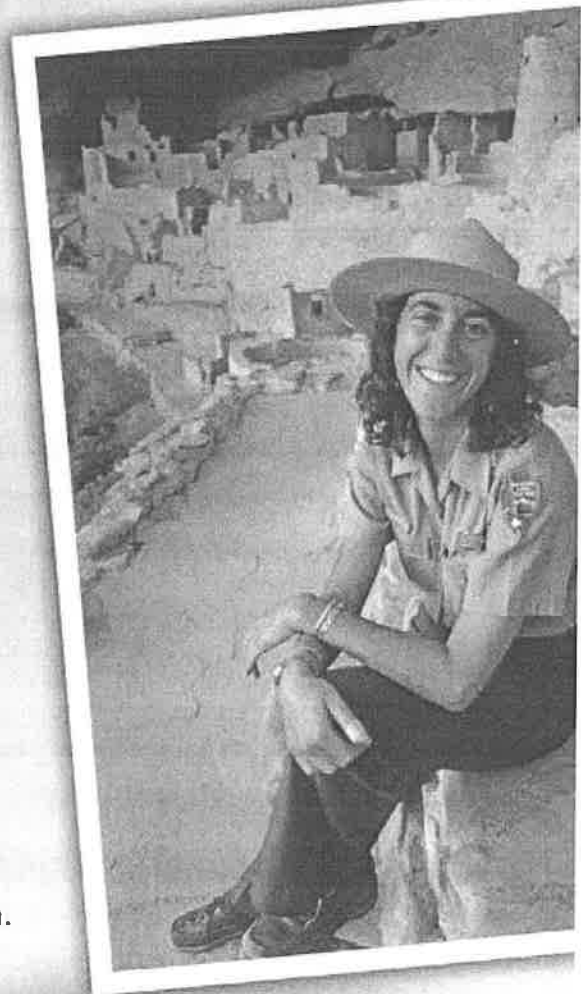
Ruben: Well... I'm not sure, but—

Rosa: What I want to know is how they built those dwellings.

Ranger Jenkins: We'll talk a bit about that during the tour, Rosa. Okay, did everyone see the alcoves in the canyon walls? These cliffs are made of sandstone and shale, and sandstone is soft—it easily breaks and crumbles away. Over time, that breaking and crumbling carved the alcoves out of the rock.

Dad: So when did the Ancestral Puebloans start living here?

Ranger Jenkins: They came to this area around 600 C.E., but it wasn't until around 1200 that they built these dwellings in the cliffs. Let's go take a closer look at their handiwork. Watch where you're walking, everyone. The steps down are really rough and uneven.



Narrator: Ruben doesn't notice he's dropped his notebook on the steps. His mother hands it to him, and then goes on ahead to take pictures.

Dad: How about that pen you were missing, Ruben? Did you find it yet?

Ruben: I don't know where it went, Dad! It's not in any of my pockets.

Rosa: See, I told you. How can he solve an ancient mystery? He can't even solve the mystery of his missing stuff!

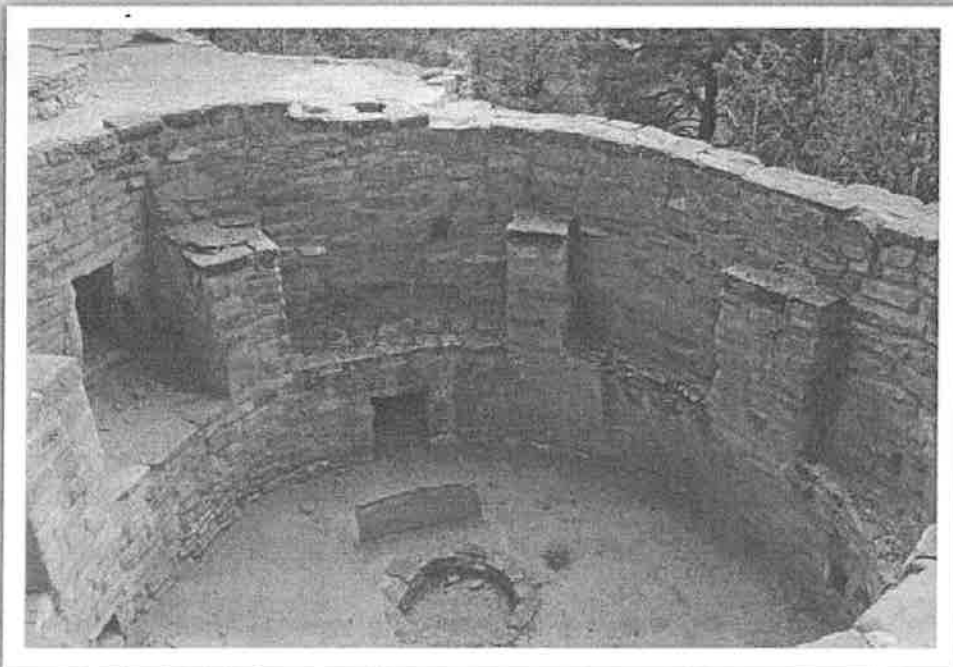
Ruben: Dad, tell Rosa to stop teasing! In fact—I bet she has my pen.

Rosa: I do not!

Dad: What does it look like?

Ruben: It has a digital thermometer on it, so I can tell the temperature! I always use it when I take tests.

Ranger Jenkins: Listen up, everyone. This round pit in front of us is called a *kiva*. A kiva is a ceremonial room. The Ancestral Puebloans built kivas for special religious ceremonies. If you look over there, you can see where the people climbed up the cliffs to the top of the mesa farm. And of course, this is Cliff Palace. Cliff Palace has twenty-three kivas and 150 rooms, which housed about 100 people, we think.





Ruben: Man, look at all these cliff dwellings!

Dad: And those towers. Just think of the work that went into building all this!

Ruben: Yeah, but the people only lived here for around 75 to 100 years. Why would they just leave?

Rosa: Maybe they were thirsty, like me. It is so hot here! And I already drank all my water.

Ruben: Hey, you could be right, Rosa! There was a drought here, sometime, wasn't there?

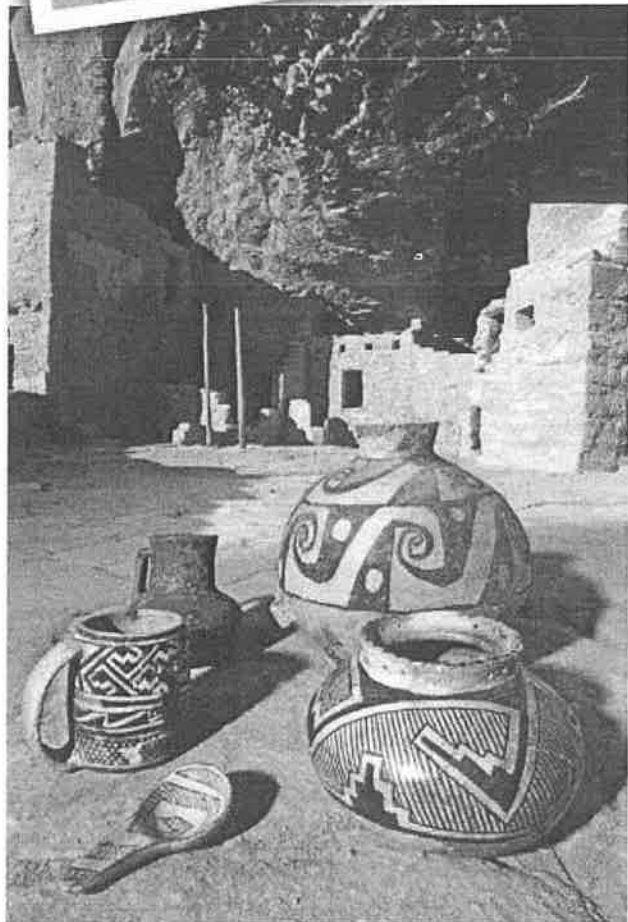
Ranger Jenkins: Yes, there was! The drought began in 1276 and may have lasted for twenty years. A lot of people think that Ancestral Puebloans left after their crops died and they didn't have enough food.

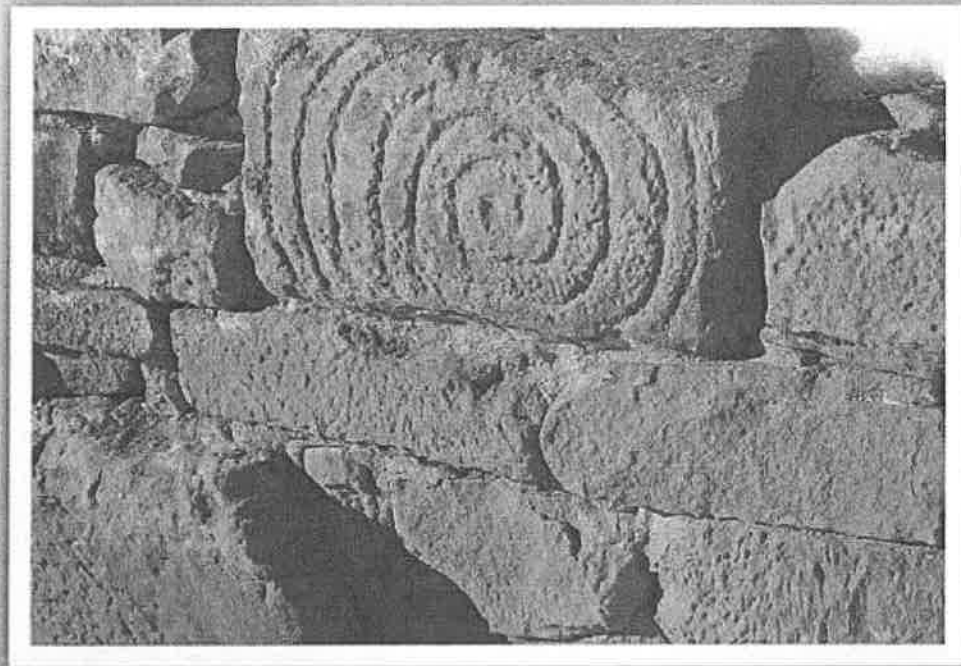
On the other hand, the people had survived droughts in the past. They stored food to prepare for hard times. Why would this drought drive them away if they had survived others?

Ruben: Don't some people think maybe a war forced them to leave?

Ranger Jenkins: Right, there may have been a war. It might have started with one group raiding another for food.

Ruben: Or maybe the different groups fought for each other's land, to get the best places to grow crops and find water.





Narrator: After discussing their ideas with Ranger Jenkins, Ruben decides to look for clues.

Mom: Ruben, did you see where Rosa went?

Ruben: Mom! All these dwellings are made of sandstone bricks. The Pueblos made them one by one—by hand! So why leave after all that work?

Dad: It's great that you're keeping notes on this mystery, Ruben. But you didn't see Rosa wander off?

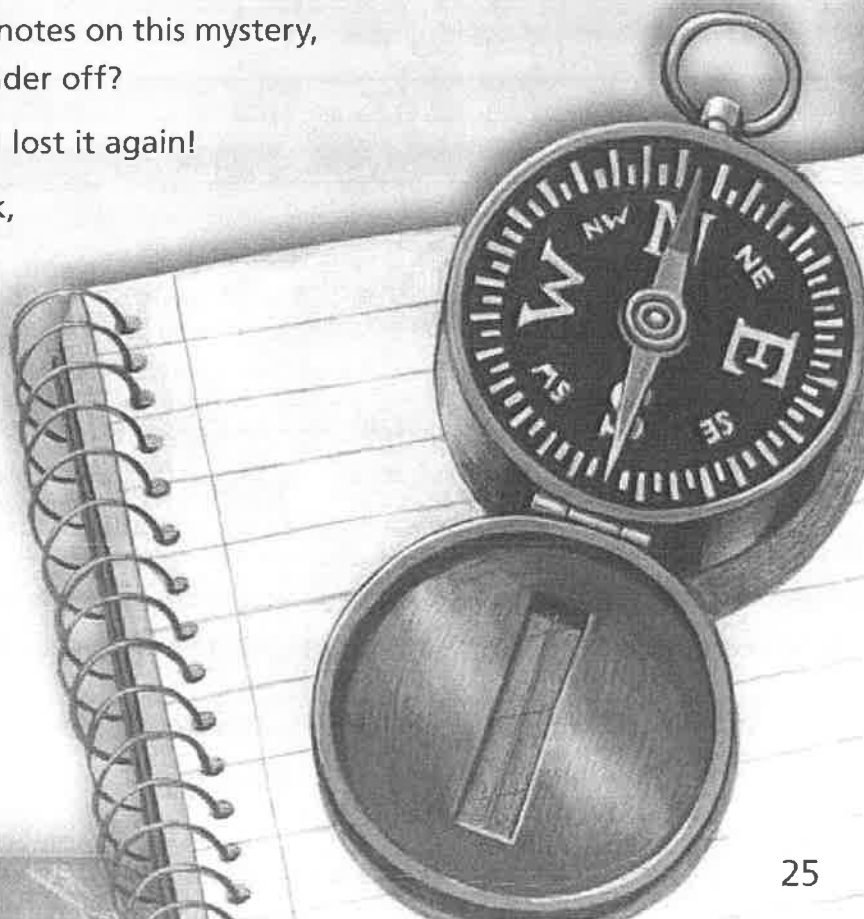
Ruben: Wait—my notebook! Dad, I lost it again!

Mom: We'll look for your notebook, Ruben, once we find Rosa.

Dad: I'll go see if she's with that group over there.

Ranger Jenkins: It's almost time to go. Take a few more minutes to look around, and then we'll climb those ladders up the cliff.

Mom: Quick, let's check all around the dwellings.



Narrator: Ruben looks around. He finds Rosa sitting in the shade of a rock wall near one of the Cliff Palace dwellings.

Ruben: What are you doing way over here, Rosa?

Rosa: Looking for shade! I was really hot and tired. I just needed to get out of the sun.

Ruben: You should have told Mom where you were going.

Rosa: I know. I was just going to sit here for a minute. But then I started looking at these cool bricks. And I started thinking how terrible it must have been to have no water here!

Ruben: That *could* be why the Ancestral Puebloans left, even though they worked so hard to build this city.

Rosa: So you haven't found out the reason for sure? Now I'm really wondering about it, too.

Ruben: No. And my notebook's lost again.

Rosa: Here it is. You left it by a tower, so I picked it up for you.

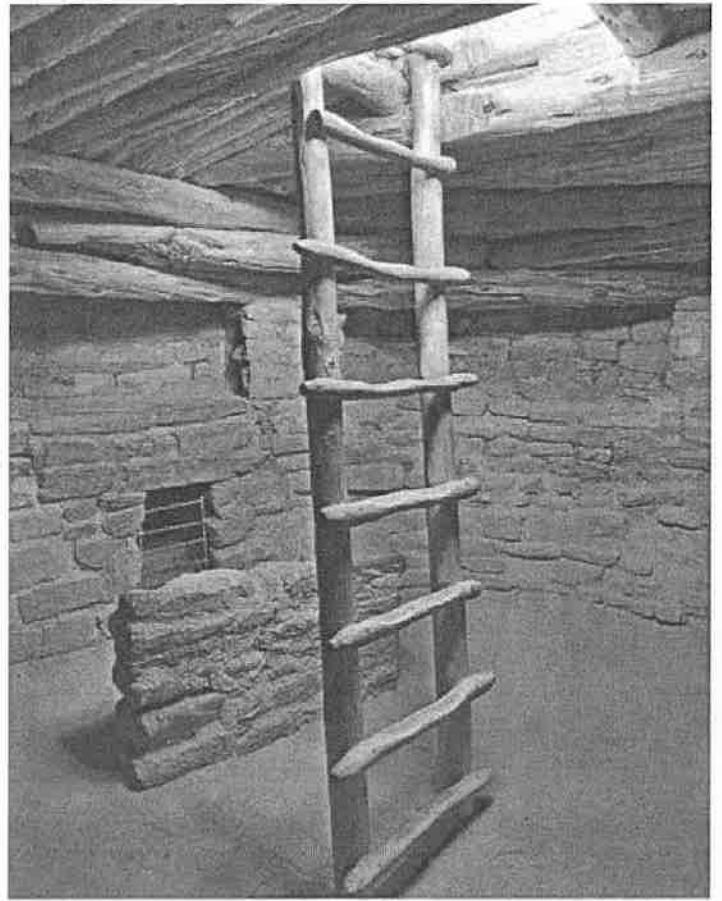
Ruben: Great! Do you have my pen, too?

Rosa: I promise I do not have your pen, Ruben. I wish I did. Then I could see exactly how hot it is out here! But being here makes me want to help solve this mystery.

Ruben: Good. But we'd better get back. It's almost time to go.

Narrator: Rosa and Ruben return to the group. Their parents are happy to see Rosa safe. The tour is about to end.

Ranger Jenkins: So, Ruben. Before we go, have you solved the mystery of the Ancestral Puebloans?



Ruben: Nope. But at least I have a few theories.

Mom: Okay, I'm ready to climb this ladder.

Ruben: Wait! Hold on, Mom! What's that sticking out of your back pocket?

Rosa: Oh, my gosh!

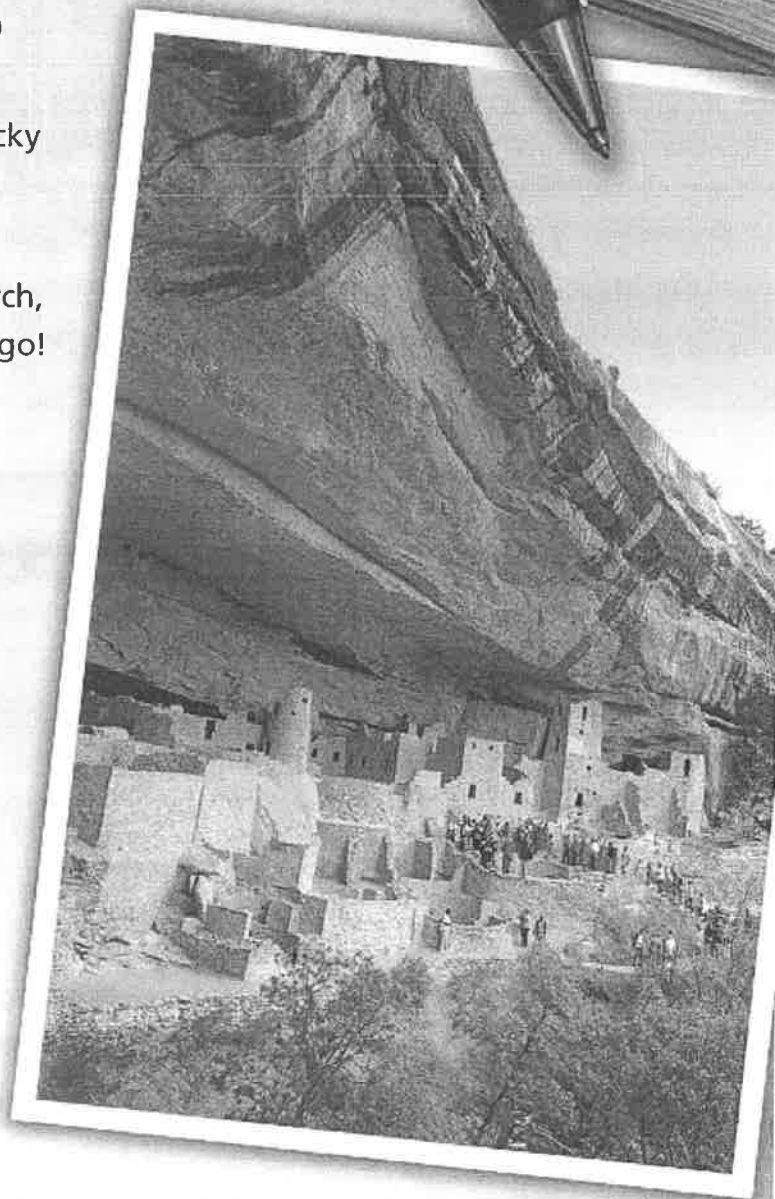
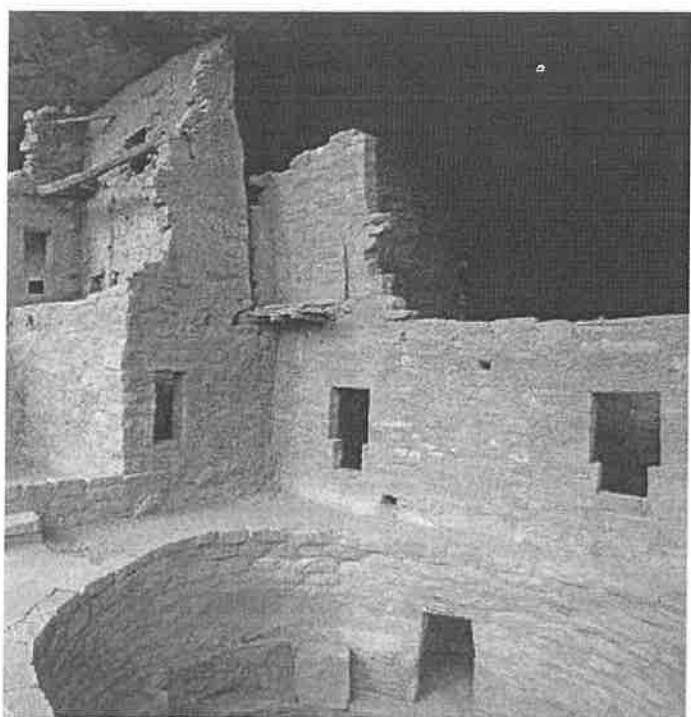
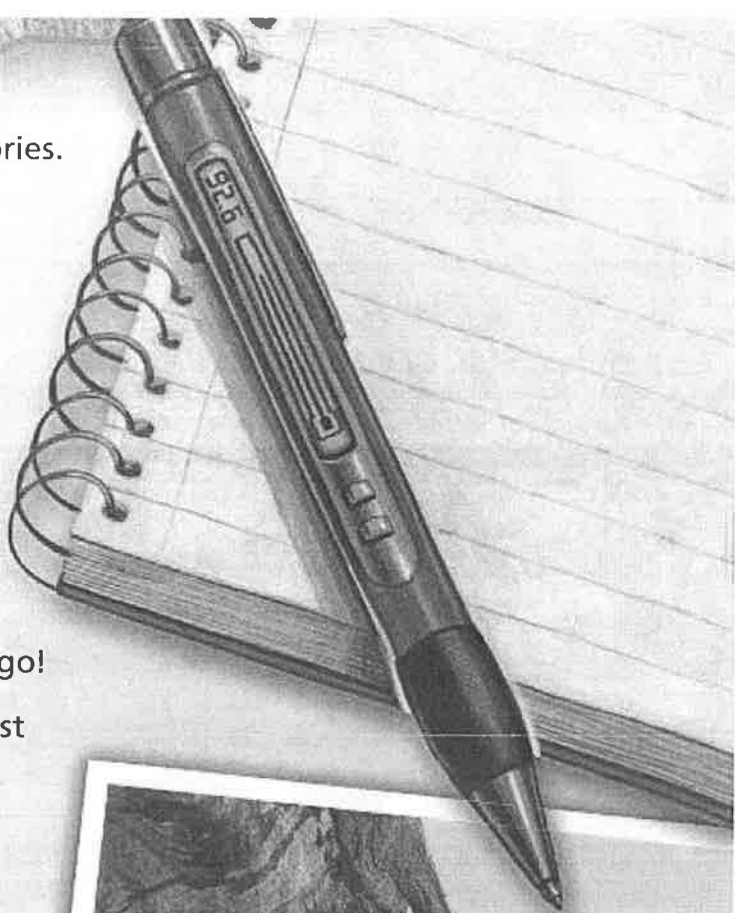
Ruben: Looks like a digital thermometer. It's my lucky pen!

Mom: Goodness, this thing? I found it on the ground near our car after we got here. I had no idea it was yours, Ruben. Here you go!

Dad: Well, we solved the mysteries of the lost Rosa, the lost notebook, and the lost pen today. Not bad for one day's work.

Ruben: Yeah, and now that I have my lucky pen back, I might solve the Ancestral Puebloans mystery in a few years!

Ranger Jenkins: With some good research, you just might! Now, everybody—up we go!

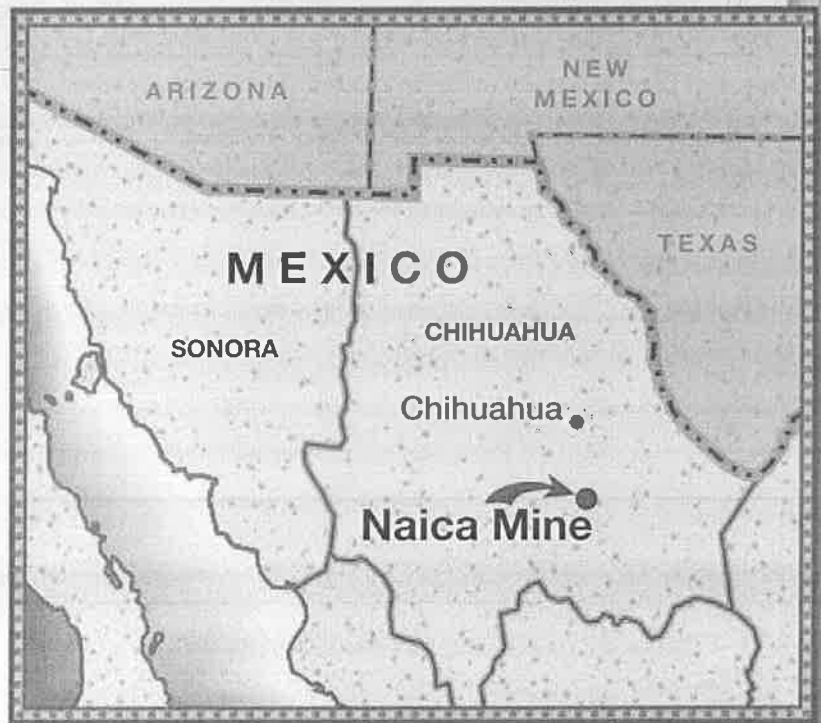


CAVE OF THE CRYSTALS

I magine yourself one thousand feet underground, drilling a new tunnel in an old zinc and lead mine. Suddenly your drill bursts through the rock wall. What you see takes your breath away. Huge crystals fill a cave from end to end, floor to ceiling. They shimmer like moonlight. But before you can explore the cave, you are hit with air as hot as a blast from a furnace.

Two mineworkers, Juan and Pedro Sanchez, discovered this amazing "Cave of the Crystals" in 2000 at the Naica Mine in the state of Chihuahua, Mexico. They didn't stay long, for the intense heat drove them away.

The mine owners put an iron door at the mouth of the cave. Scientists came to study the cave, but because of the heat, they could stay inside for only a few minutes at a time.



The Cave of the Crystals is located in the desert of northern Mexico.



**Inside Mexico's
Cave of the
Crystals**

Scientists found the crystals were made of selenite gypsum, a translucent, light-colored mineral. The cave had just the right combination of minerals, water, and temperature to grow the crystals. The cave had once been filled with water, and heat from the earth's core kept the water at about 136 degrees Fahrenheit. This heated water caused some of the crystals to grow 36 feet long, about as tall as a three-story house! These are some of the largest natural crystals ever found.

Another team of scientists is now exploring the whole cave, which is nearly as large as a basketball court. They had to invent special clothing and breathing equipment for their work. Now they can stay inside for up to an hour at a time.

Water pumps keep the Naica Mine from filling with water. But without water the crystals will not grow any larger. Should the owners stop pumping out the water, so that the caves will flood again and the crystals will grow even larger? Or should they keep on pumping out the water, so that people can visit the cave? What would you do?



**It took hundreds of thousands of years
for the 36-foot crystals to get that big.**

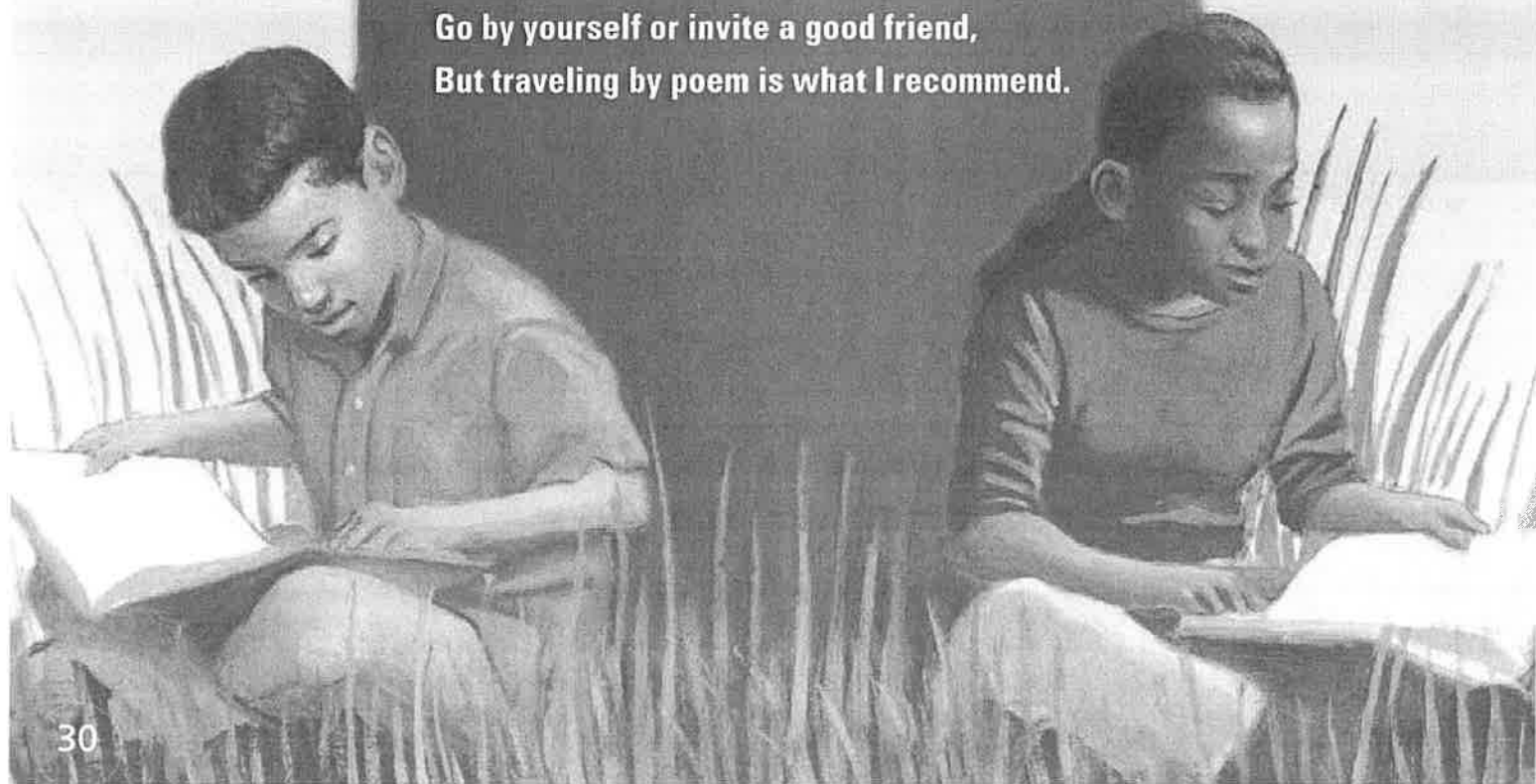
Places and Names: A Traveler's Guide

By J. Patrick Lewis

So many places have fabulous names,
Like Fried, North Dakota,
The Court of St. James,
Siberia, Nigeria, Elyria, Peru,
The White Nile, Black Sea,
And Kalamazoo!
The Great Wall of China, South Pole and Loch Ness,
And 104 Fairview—that's my address!

Thousands of spaces are places to be—
Discover the World of GE-OG-RA-PHY!

Travel by boat or by car or by plane
To visit East Africa, Singapore, Spain.
Go by yourself or invite a good friend,
But traveling by poem is what I recommend.



Los libros

By Francisco X. Alarcón

pasaportes
de talla mayor

que nos permiten
viajar

a dondequiera
cuandoquiera

y no dejar
de soñar

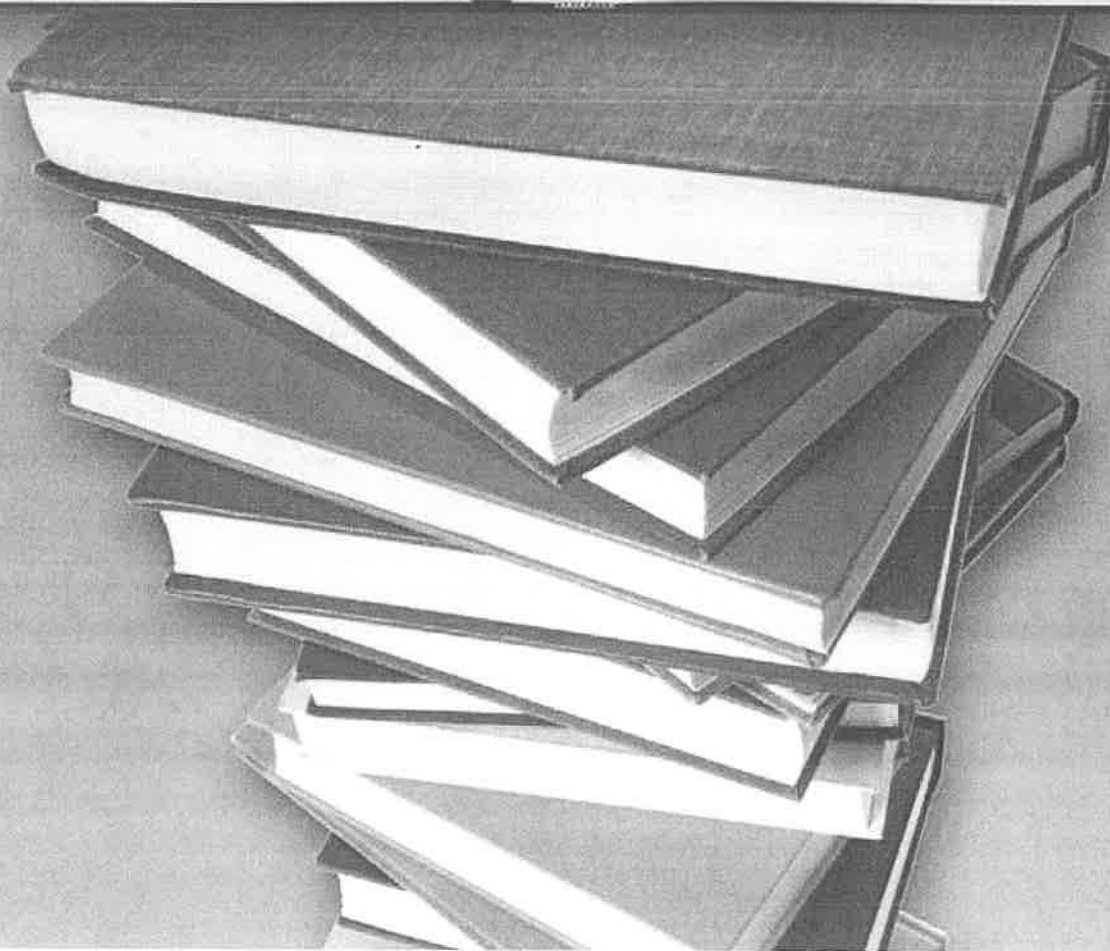
Books

oversized
passports

that let us
travel

anywhere
anytime

and keep on
dreaming



Character Match

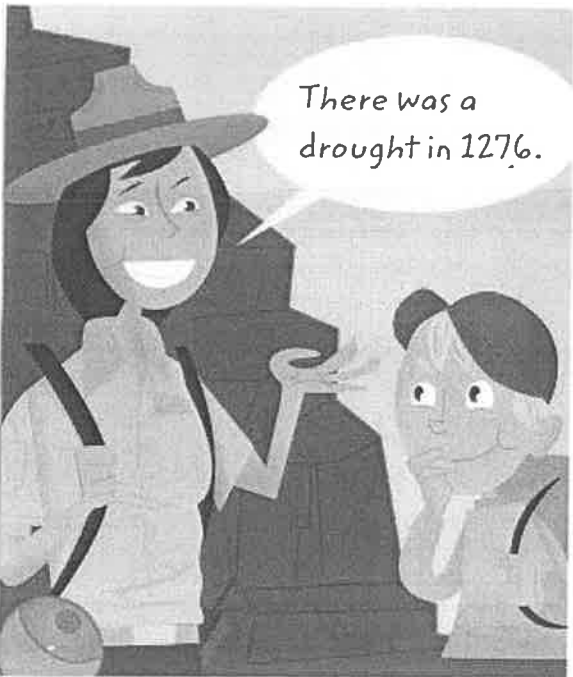
Why did the cliff dwellers leave?



Think about Ruben, Rosa, and Ranger Jenkins in "Mysteries at Cliff Palace." Each one shows special personality traits. Read the traits below. Then match each one to the character who best shows that trait.

- a** knowledgeable
- b** curious
- c** teasing
- d** forgetful
- e** helpful

There was a drought in 1276.



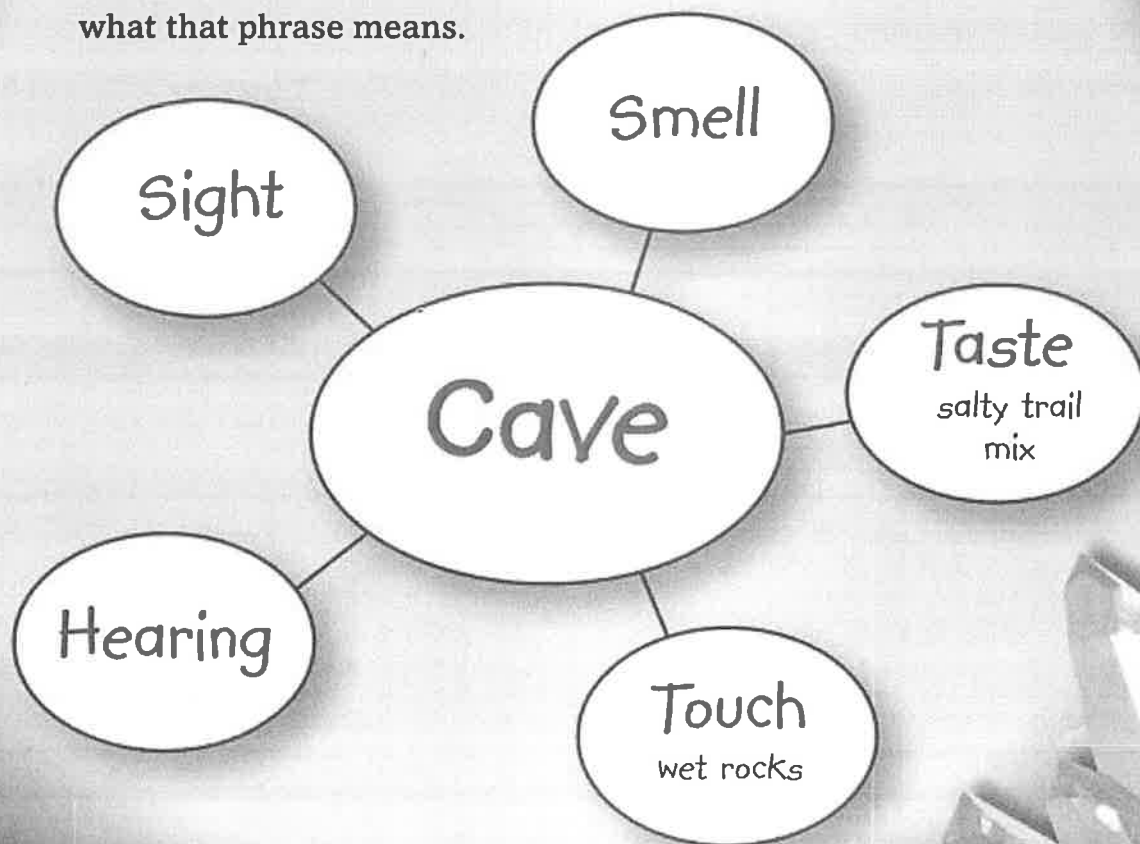
How does each trait contribute to the character's role in the story?

On a sheet of paper, draw a comic strip. Show characters' traits through their words.

Sensing the Cave

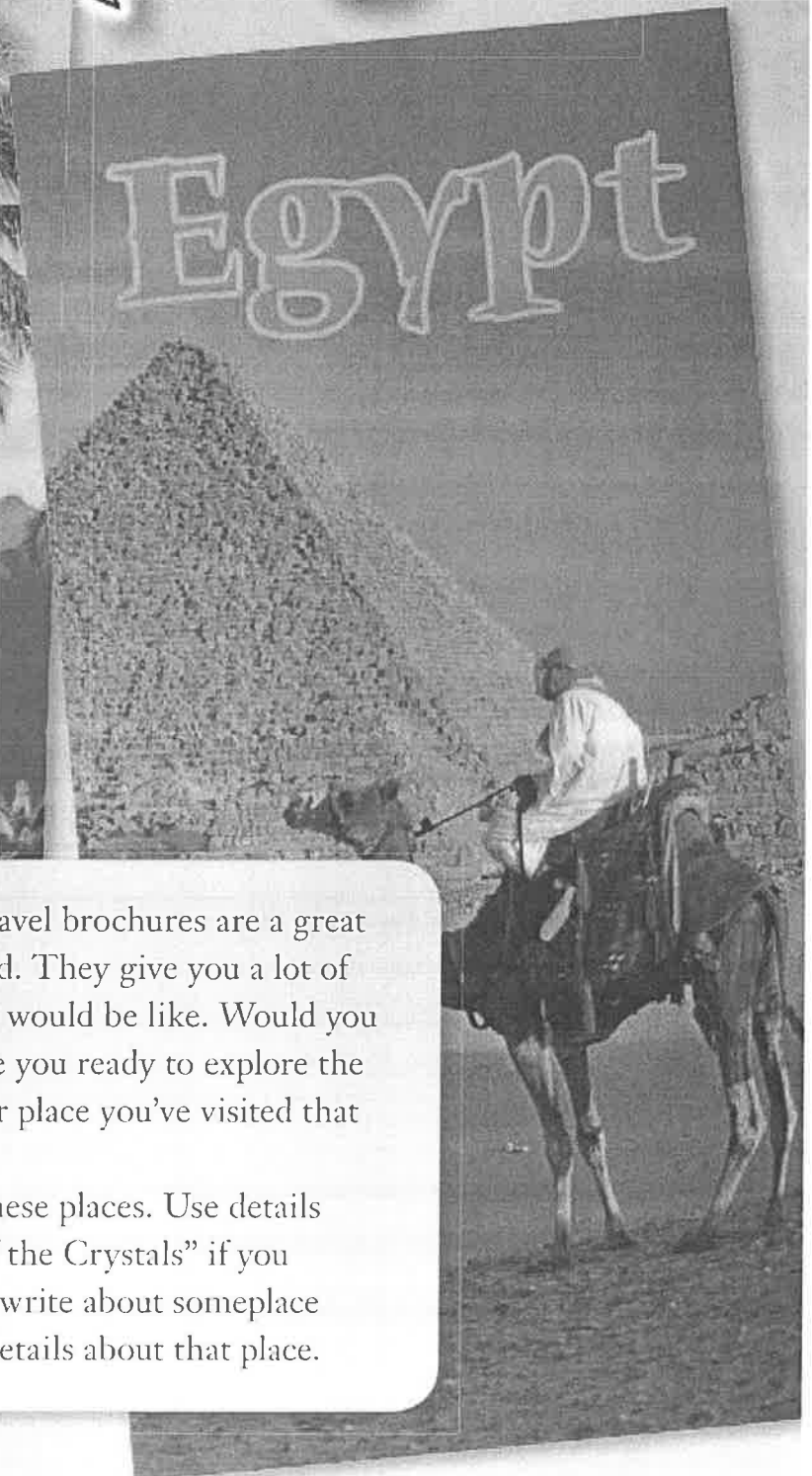
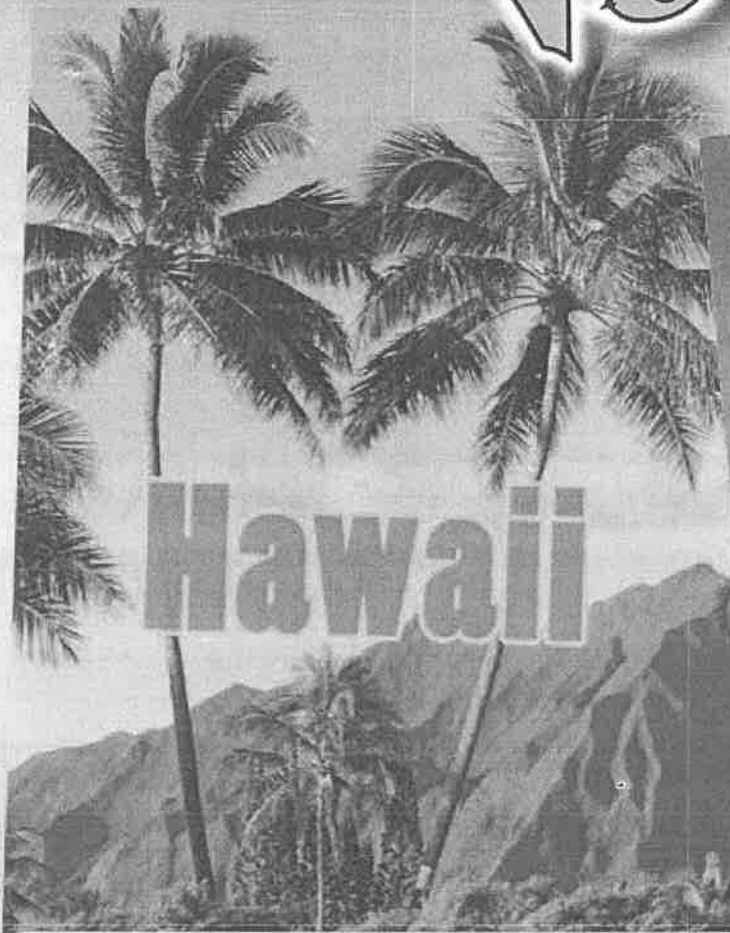
Imagine a hike to the Cave of the Crystals or another kind of cave. Think about the details your five senses would give you. On a separate sheet of paper, make a word web like the one on this page. Fill in each oval with sensory details for that sense. Below are two examples.

Use your web to write a description of your hike. A description can include an idiom, a phrase whose meaning is different from the meanings of its words. Think about the idiom “takes your breath away” in the first paragraph of “Cave of the Crystals.” Discuss with a partner what that phrase means.





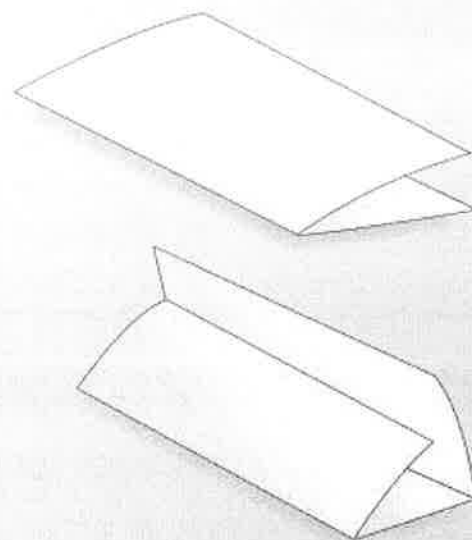
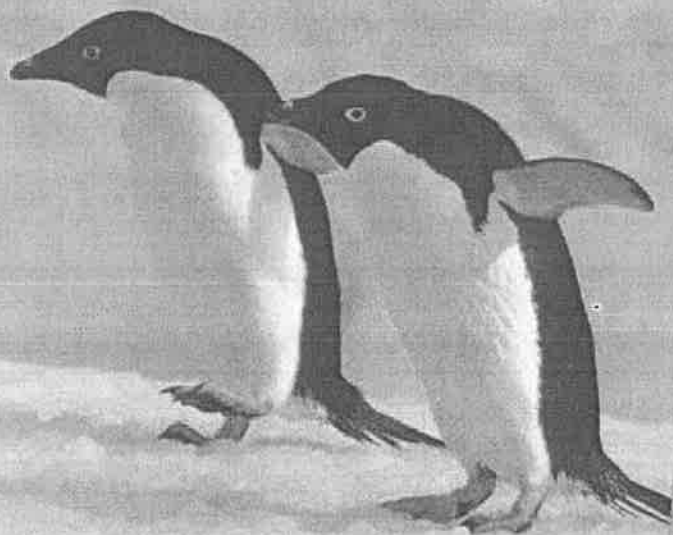
Bon Voyage!



Hawaii? Egypt? The South Pole? Travel brochures are a great way to learn about places you've never visited. They give you a lot of details so you can imagine what a visit there would be like. Would you like to go to Mesa Verde National Park? Are you ready to explore the Cave of the Crystals? Or is there some other place you've visited that you really enjoyed?

Create a travel brochure about one of these places. Use details from "Mysteries at Cliff Palace" or "Cave of the Crystals" if you choose to write about either of these. If you write about someplace else, try to remember the most interesting details about that place.

South Pole



To start, fold a piece of letter-sized paper in half or in thirds. This will give your brochure a cover and some places inside for information. Title your brochure and make the cover colorful and interesting. Inside, give your readers details that would make them want to visit. Remember to write in a way that uses all the senses. If you paint a picture with words, your readers will easily imagine the place—and they'll want to visit it themselves!

To help you as you write, think about these questions:

What is unique about the destination?

What is the weather like?

What kinds of activities are offered?

Will visitors need special clothing?

Where can visitors stay?

Finally, draw pictures or cut out photos from magazines to illustrate your brochure. Bon voyage!