



Caves

by Meredith Costain

Overview

This book explores different types of caves and how they are formed and describes life forms found in caves.

Literacy Focus

High Frequency Words

animals, cave, explore, form, ice, light, plants, rock, water

Content Words

cavens, chambers, cave systems, limestone, stalactites, stalagmites, column, lava, glaciers, submerged, eruptions, spelunking

Word Attack and Vocabulary Skills

- Decoding compound words
- Using action verbs

- Using context clues that give definitions

Comprehension/Thinking Skills

- Identifying cause and effect in cave formation
- Comparing and contrasting types of caves
- Identifying key facts about cave features

Book Parts and Text Features

- Contents page, glossary, and index
- Chapter titles and subheads

- Captions
- Diagrams

Writing/Speaking and Listening

- Writing questions about caves
- Discussing how caves are formed
- Using new vocabulary to describe exploring a cave

Observe/Assess

See *Graphic Organizers* on page 141 and *Multiple-Choice Test* on page 191.

Science Focus

Content and Thinking Skills

- Identifying cave features
- Comparing and contrasting types of caves and types of cave formations
- Identifying cave regions and life forms

Background Information

Caves are natural underground hollows. When they form, caves contain water. Water trickles down through cracks in the rock, dissolving carbon dioxide on its way, which creates a mild acid that dissolves the softer rock, forming chambers and passages. Then the water table sinks, or earth is pushed up, and the cave fills with air.

Correlation to National Standards

Earth and Space Science

- Properties of Earth Materials

Life Science

- Organisms and Environments

See *Standards Chart* on pages 226–227.

Literacy Focus

Set the Scene

Invite children to tell about any caves they have visited and tell what they know about caves.

Ask:

What is it like in a cave?

What might you find in a cave?

Read and Discuss

Cover, Title Page, and Contents Page

Have children look at the cover and title page. Ask:

What is hanging from the ceiling of the cave?

Why do you think the man is dressed this way?

Have children skim the table of contents and list three topics they think the book will discuss.

Page 3

Have a volunteer read the introduction aloud. Ask children what they would like to learn as they read the book.

Pages 4–9

Preview the pages, pointing out the diagram and asking children to describe what they see in each

picture. Then have children read the chapter and discuss the facts. Ask:

Which picture shows a cave system?

Why are caves found in limestone formations?

What is the difference between a stalactite and a stalagmite?

Pages 10–22

Discuss life forms found in caves and types of caves. Preview boldfaced Content Words to ensure that children understand new words. Ask:

What are the three zones in a cave?

Why do animals that live in the dark zone of a cave need to have good hearing?

Which type of cave would be most fun to explore? Why?

Discuss the equipment needed to go spelunking.

Respond

- Draw a cause-and-effect organizer on the board. Write “A cave is formed.” in the effect

box. Ask children to explain what causes a cave to form.

- Explain that action verbs make text more exciting and help you visualize what is happening. Have children reread page 18 and point out the action verbs they find. (*create, erupts, flows, cools, hardens, continues, leaves*)



Content Words

Activity Master, page 28

Have children draw pictures and write definitions and words to demonstrate understanding.



English Language Learners

Have children find the smaller words used to build these compounds: *sunlight, rainwater, underwater*. Have them tell the meanings of both words in each pair.

Science Focus

Science Concept

Most caves are underground systems hollowed by rainwater. Caves are habitats for specially adapted plants and animals. People use safety gear when exploring caves.

Activities

Cave Comparisons

Discuss ways in which ice caves, underwater caves, and lava tube

caves are similar to and different from “normal” caves.

Cave Research

Have children investigate cave systems of the United States. Partners can read about a chosen cave system and report what they learn to the class. Make a chart comparing the cave systems.



Cave Zones

Activity Master, page 29

Have children draw a diagram of a cave that shows the light zone, the twilight zone, the dark zone, and the types of life found in each zone.

Name _____

Caves

Draw a picture of a cave system. Label the following parts:
chamber, stalactite, stalagmite, column.

Write the meaning for each word. Use the book glossary and the text to help you.

1. **cavern** _____

2. **cave system** _____

3. **limestone** _____

4. **lava** _____

5. **glacier** _____

6. **submerge** _____

7. **erupt** _____

8. **spelunking** _____

Name _____

C a v e s

Draw a diagram of a cave that shows the light zone, the twilight zone, and the dark zone and label each zone. Then draw and label two things that live in each cave zone.

Write a sentence that describes your drawing.
