

Teacher Guide for ASK

July/August 2012: Caves Rock!

This teacher guide was prepared by Betty Lou Askin, a retired educator who resides in Toronto, Ontario.

Objectives:

- To appreciate the ancient cave art
- To learn about the new findings in cave art-children's fluting
- To gain an understanding of cave development

Introduction: Pre-reading activities

- Let the students suggest what they think might be included in this issue of ASK based on the title.
- Ask them what they think is happening on the cover.
- View the Contents pages and discuss the pictures and article titles.

Scoops (pages 2-3)

Musical Mummy

- Why were archaeologists surprised with this new discovery?
- Who was the female mummy?

Foxes Face Fine Future

- Why is this turnaround of foxes special?
- What makes up their diet?

Cranes, Planes and Trucks?

- What accompanies the whooping crane south?
- What might cause the crane to stop when going south?

Make Your Own Molecule

- Describe what was included in Clara's model.

Ask the students to look for more science "scoops" when they read the newspaper or watch television news/shows. Create a bulletin board to post their data.

Nestor's Dock (pages 4-5)

- Use the cartoon as a pattern example. Ask the students to suggest ideas and comments of their own.

The Secret Cave (pages 6-13)

Use these questions and ideas with this article:

- Who was Monsieur Laval?
- Where did he take Jacques classmates?
- What was the beginning of art?
- What did Marcel tell the other boys?
- How did the boys enlarge the hole?
- Describe the tunnel.

- What did they see in the cave?
- What did they see in other passages?
- What was on the wall in the deep shaft?
- Why do you think that Monsieur Laval was doubtful of Jacques' story?
- How did the boys protect their discovery?
- Explain how the ancients created their art.
- Creative Work: Develop a newspaper or television report describing the discovery of Lascaux. Include pictures in the presentation.

Finger Painting (pages 14-15)

Reading for understanding:

- Why is the cave at Rouffignac famous?
- What are **finger flutings**?
- What is very interesting for Jessica Cooney?
- Describe what specific details can be known from flutings.
- What is a **tectiform**?
- Why do you think that ancient people made drawings in caves?
- Creative Work: Let the students look at cave art using library books and/or the computer. Ask them to create ancient drawings of their own.

The 30,000-Year-Old Artist (page 17)

Creative Work:

Let the students work in pairs. Use the ideas, questions and responses on page 17 as an example. Ask the students to create questions and answers for the ancient artist. Have each pair of students share their work with the rest of the class.

How to Make a Cave (pages 18-21)

Vocabulary: Bacteria, limestone, carbon dioxide, carbonic acid, evaporates, minerals, stalactites, stalagmites, erupting, lavatites, lavamites, gypsum, sulphuric acid

Reading for information:

- Describe three ways that caves can be made besides the way that is the focus of this article.
- What forms limestone?
- What is carbonic acid?
- What does carbonic acid do to limestone?
- How are stalactites formed?
- What are stalagmites?
- Describe how lava forms caves.
- Why are ice caves real caves?
- Explain what is different about the Carlsbad Cavern.

Home Sweet Cave (pages 22-23)

- Explain the use of title to the students-Home Sweet Home.
- Tell how the "fairy chimneys" developed.
- Describe the Sleeper family home.
- Why is their home eco-friendly?
- How are yaodongs constructed?
- Describe the homes in Holy Austin Rock.

Mystery in the Dark (pages 24-27)

Questions to use with this article:

- What equipment do the scientists take with them to prepare for the excursion?
- What is a **hibernaculum**?
- What is WNS?
- What equipment is needed at the research station?
- Describe how the scientists test the bats.
- Why does the fungus attack hibernating bats?
- What happens to an infected bat?
- Tell how scientists hope to cure infected bats and to prevent WNS.

Jimmy the Bug (page 32)

- How do tears help your eyes?
- Why are crying tears different?
- Why do you think that we have crying tears?

Marvin and Friends

Explain how Watson fooled his friends.

Don't forget to:

- Tour Lascaux at www.lascaux.culture.fr
- Enter the contest **Pictures Tell a Story** on page 31.