



Deep, Dark, and Mysterious



Name: _____

1. **Word Meanings:** Use these words from the story to complete the word puzzle.

Word Box

acid formation glacier lava limestone passages secrets tourist

Clues										
a) a chemical that joins with a base to make a salt										
b) melted rock that comes out of a volcano										
c) information that we promise not to tell to others										
d) a large mass of ice that moves slowly										
e) a person who travels for pleasure										
f) routes, paths or ways by which things can pass										
g) the process of making something										
h) a rock used for building										

2. Think about what you already know about caves. Read these sentences. Then write **True** or **False** on the line in front of the sentence.

- _____ a) Most caves are found in areas of hard rock called granite.
- _____ b) Historians can gather a great deal of information from caves about how prehistoric people lived.
- _____ c) Rock formations inside of caves are known as speleothems.
- _____ d) Lava tube caves often have a regular shape and very smooth sides.
- _____ e) Ice caves usually form underwater.
- _____ f) The words "caving, potholing, and spelunking" are all used to describe the sport of exploring caves.

As you read this article, you will find the true facts about these sentences.



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What am I?

I can provide a home to animals, birds and insects. I can hold secrets from the past. I can be a great place for some adventurer to explore. If you were able to guess that I am a cave, you are right!

A cave is a natural hollow in the ground which is large enough for a human to enter. Some caves may end a few feet inside the entrance. Others can stretch for miles and miles. Formation of a cave takes thousands of years. Caves can be created in different ways. Some of these ways are:

Underground Water Action:

The most common place to find a cave would be in areas that have limestone rock. It begins when water on the earth's surface begins to trickle down through cracks in the rock. The water contains a gas called carbon dioxide. This forms a weak acid that eats away at the limestone. The water travels underground, forming passages and caves as it travels.

Lava Tube Cave:

This type of cave is formed from hot flowing lava. The outer lava cools and hardens. The hot lava inside continues to flow out. The hot lava finally drains completely out of the tube and a cave is created.

Sea Cave:

This type of cave is also created by the action of water. The force of the ocean waves will erode a rocky shoreline. The softer materials will be washed away, leaving a cave in their place.

Ice Caves:

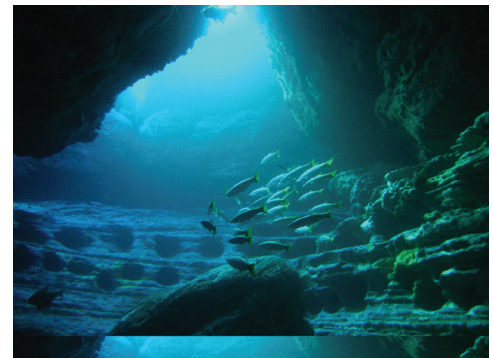
These caves form inside a glacier. The ice starts to melt as the glacier approaches warmer areas of land. Streams of water form under the ice. They combine with warm air and hollow new caves.



Limestone Cave ▲



Lava Tube Cave ▲



Sea Cave ▲



Ice Cave ▲



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Over a great deal of time, water can create a whole system of caves that are linked together. There may be tunnels and passageways of many different sizes. There are amazing rock formations and waterfalls to be seen underground. Many cave systems are popular tourist attractions. Here are some of those famous spots:

- The largest known cave system is Mammoth – Flint Ridge Cave System in Kentucky, USA. It stretches for over 300 miles (500 km). Some scientists believe that there is even more of it yet to be discovered.
- The world's largest cave is the Sarawak Chamber in Gunung Mulu National Park in Malaysia. The average width is 985 feet (300 m) and its length is 2,300 feet (700 m). Its lowest height is 230 feet (70 m).
- The world's deepest cave is Reseau Jean Bernard in France. It is found 5,036 feet (1,535 m) underground
- Caves are usually dark, damp, and home to strange looking formations called speleothems. These eerie formations are made by water trickling or seeping into the cave. The most commonly known speleothems are stalactites which hang down from the ceiling like icicles and stalagmites which rise up from the ground like spikes. Sometimes a stalactite and a stalagmite meet, join, and form a column.

3. Draw and label a diagram to show the inside of a cave with stalactites and stalagmites.

Even though they can be dark and damp, caves have always been fascinating to people. Historians and anthropologists are interested in the development of human beings. Caves provide them with a huge amount of information about cave dwellers and how they lived. Scientists study bones and other materials found in caves. They examine the layers of soil to get clues about the climate, plants, and animals of those prehistoric days. Other scientists called geologists study rocks, soils, and fossils to find out about the history of our earth.

Caving is a popular sport, but it can be dangerous. People who explore caves for sport are called spelunkers or potholers. Cavers always explore in groups. They carry sturdy ropes and other safety and climbing gear. They wear hard hats and heavy clothing to protect themselves against jagged and sharp rocks. Caving is also hard work. These explorers crawl through low passages on their hands and knees. They squeeze through tiny openings. Sometimes they have to climb slippery, steep rocks. But the thrill of the landscape and the sense of adventure make these hardships vanish!



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4. Reread the second last paragraph in this article.

a) Write a meaning for each of these words. Use a dictionary if you need help.

historian: _____

anthropologist: _____

geologist: _____

b) How would these scientists be involved in the study of caves?

5. **Caving** is becoming a popular sport. Why do you think this is so?
Would you go caving if you had the chance? Why?

Thinking Beyond the Facts

Try to find out more about caving or spelunking.
Use magazines, non-fiction library books, and the internet to help you.
Here are some websites to help you get started:

www.wikipedia.org

www.encyclopedia.com