



# Cave Quiz Game: An Interactive Review Game

**Lesson Objective:** This interactive activity uses the Microsoft PowerPoint program to review key cave concepts presented throughout the Caves and Karst Curriculum Guide.

**Key Concepts:** speleothem formation, types of caves, ways that caves form, fossils, names of speleothems.

**Duration:** 1 55-minute class period

**Audience:** Middle school and high school students

Cave Quiz Game

Teacher Copy  
and  
Answer Key



NPS Photo by Rick Wood

# CAVE QUIZ GAME

## TEACHER INSTRUCTIONS

### Playing the Game:

1. Organize students into small cooperative groups. Depending on the nature of the group, either assign groups or allow students to self-select their groups.
2. Access the game via the internet or a CD. The individual slides can be viewed using Adobe Reader, but open and run the game using the Microsoft PowerPoint program.
3. Start the game by clicking the Slide Show button from the top toolbar and select "View Show". The review game is now ready to begin.
4. When a question slide is opened, you need to click on the grey background for the question to appear. If you click again the answer will appear. Once the question has been answered, use the button on the bottom left side of the page to return to the main page.
5. Students can select from any of the five categories. Once a selection has been chosen, it will disappear so that it cannot be chosen again.

### Helpful Hints:

1. If you need to exit the game once it is running, use the "Esc" key on your keyboard.
2. If you need to go back, use the arrow on your keyboard that points to the left.

## Cave Quiz Game Questions

Quiz Board Heading	Value	Question	Answer	Location in Curriculum Guide
Speleothems	100	Speleothems are frequently formed when this fluid drips from a cave ceiling.	Water	Making a Cave (page 1); Speleothems-Webquest (page 6)
	200	Speleothems form as these precipitate out of fluids and are deposited onto cave ceilings and walls.	Minerals	Growing Speleothems (page 2); Speleothems-Webquest (page 1)
	300	Speleothems consist mainly of this type of mineral:	Calcite	Growing Speleothems (page 2); Speleothems-Webquest (page 1)
	400	True or False: The term "speleothem" refers to what a cave formation looks like (its morphology), and not its composition.	True	Speleothems-Webquest (page 1)
	500	One thing that all speleothems have in common is that they cannot form until the level of the cave is above this:	Water Table	Interactive Reading Guide #1 (page 4); Speleothems-Webquest (page 1).
Types of Caves	100	These types of caves are produced from the action of waves pounding against rocks that line the shores of oceans and lakes.	Sea Caves	Interactive Reading Guide #1 (page 5); How Caves Form-Webquest (page 4).
	200	This type of cave was commonly used by early people for shelter.	Sandstone Cave	Interactive Reading Guide #1 (page 6); How Caves Form-Webquest (page 5).
	300	This is another name for a lave cave:	Lava Tube	Interactive Reading Guide #1 (page 5); How Caves Form-Webquest (page 3).
	400	The name of this cave is named for the piles of rocks that are produced from rockslides.	Talus Caves	Interactive Reading Guide #1 (page 5); How Caves Form-Webquest (page 4).
	500	Name the 2 types of ice caves: 1.) This type is formed in ice. 2.) This type is formed in rock, but stays frozen year around.	1.) Glacier Cave 2.) Frozen Cave	Interactive Reading Guide #1 (page 6); How Caves Form-Webquest (page 5).

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The Formation of Caves	100	This type of cave is formed when acidic water dissolves rocks like limestone.	Solution Cave	Interactive Reading Guide #1 (page 3); Making a Cave (page 1).
	200	This type of cave is formed when the action of earthquakes form natural cracks in rock.	Tectonic Cave	Interactive Reading Guide #1 (page 6).
	300	The hard upper crust of lava caves is formed as this touches the flowing lava and cools it down.	Air	Interactive Reading Guide #1 (page 5).
	400	This is the term used when referring to the act or process of dissolving.	Dissolution	Interactive Reading Guide #1 (page 3); How Caves From-Webquest (page 2).
	500	The ceilings of water-filled caves are supported by this type of force:	Buoyant Force	Interactive Reading Guide #1 (page 4); How Caves From-Webquest (page 1).
Cave Life	100	What name is given to the animals that love to spend time in caves?	Troglaphiles	Cave Life ( <i>Troglaphiles</i> Fact Sheet)
	200	What is the name for the cave animal that is only a periodic visitor?	Trogloxene	Cave Life ( <i>Trogloxenes</i> Fact Sheet)
	300	What name is given to those animals that are adapted to spend their entire life in caves?	Troglobites	Cave Life ( <i>Troglobites</i> Fact Sheet)
	400	What factor is used to determine in which category a cave animal is classified?	The amount of TIME an animal spends in the cave.	Cave Life (student worksheet page 1)
	500	Name the 4 life zones in a cave.	4 Life Zones = Entrance Zone; Twilight Zone; Variable Temperature Zone and Total Darkness; and the Dark Zone	Cave Life ( <i>The 4 Life Zones of Caves</i> Fact Sheet)

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Name That Speleothem	100	What 2 types of speleothems have joined together to make this column? [Picture of a column]	1. Stalactite 2. Stalagmite	Speleothems-Webquest (page 3).
	200	This speleothem sometimes resembles bacon...what is it? [Pictures of draperies]	Drapery	Speleothems-Webquest (page 4).
	300	What type of speleothems are these? [Picture of a cave flower]	Cave Flowers	Speleothems-Webquest (page 2).
	400	This speleothem can eventually grow into a stalactite. What is it? [Picture of a soda straw]	Soda Straw	Speleothems-Webquest (page 6); Present a Cave-Timpanogos Cave Fact Sheet
	500	What type of speleothems are these? [Picture of boxwork]	Boxwork	Speleothems-Webquest (page 2); Present a Cave-Wind Cave Fact Sheet
Fossils and Rocks	100	What are the 3 main rock types?	Igneous, Sedimentary and Metamorphic	The Rock Cycle Review (page 1)
	200	What are the spaces between the soil particles called?	pore spaces	Porosity Mini-Lab (page 1); Porosity of Sediments (page 1)
	300	Of the 3 main rock classifications, nearly all fossils are found in this type:	Sedimentary Rocks	Caves and Fossils Worksheet (page 2); Sediments and Solution Caves: Part 2 (page 1).
	400	This is the term given to the study of forms of life existing in prehistoric or geologic times, especially as represented by fossils.	Paleontology	Caves and Fossils Worksheet (page 1)
	500	The nests of packrats can be considered biological warehouses due to the enormous amounts of fossils they contain. What is the name for these nests?	Middens	Hidden Treasures Fact Sheet