



National Standards  
addressed by the  
Caves and Karst  
Lesson Plans:

Science

Technology

Language Arts

Math

# National Education Standards Standards **Science**

# Cave & Karst Lessons and Activities

National Education Standards Science	Cave & Karst Lessons and Activities														
	Interactive Reading Guide #1	Interactive Reading Guide #2	How Caves Form: A Webquest	The Rock Cycle Review	Making a Cave	Growing Speleothems	Speleothems: A Webquest	Sediments and Solution Caves: Part 1	Caves and Fossils	Sediments and Solution Caves: Part 2	Hidden Treasures	Porosity Mini-Lab	Porosity of Sediments	Cave Life: A Jigsaw Activity	Present a Cave
<b>Science (Grades 5-8 )</b>															
NS. 5-8. 1 Science As Inquiry	• Abilities necessary to do scientific inquiry.				•	•	•		•	•	•	•	•	•	
<b>NS. 5-8. 2 Physical Science</b>															
• Properties, and changes of properties, in matter.	•	•	•	•	•	•	•	•	•	•	•	•	•		
<b>NS. 5-8. 3 Life Science</b>															
• Structure and function in living systems.	•	•	•		•	•	•	•	•	•	•	•	•		
• Populations and ecosystems.	•	•								•		•	•		
• Diversity and adaptations of organisms.										•		•	•		
<b>NS. 5-8. 4 Earth &amp; Space Science</b>															
• Structure of the earth system.	•	•	•	•	•	•	•	•	•	•	•	•	•		
<b>NS. 5-8. 6 Personal &amp; Social Perspectives</b>															
• Populations, resources, and environments.	•	•	•	•	•	•	•	•	•	•	•	•	•		
• Science and technology in society.	•	•													
<b>NS. 5-8. 7 History &amp; Nature of Science</b>															
• Science as a human endeavor.	•	•						•	•	•	•		•		
• Nature of science.	•	•	•	•	•		•		•	•			•		
• History of science.	•	•		•				•					•		

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<b>Science (Grades 9-12 )</b>															
NS. 9-12.1 Science As Inquiry	• Abilities necessary to do scientific inquiry.				•	•	•	•	•	•	•	•	•	•	
<b>NS. 9-12.2 Physical Science</b>															
• Properties, and changes of properties, in matter.	•	•	•	•	•	•	•	•	•	•	•	•	•		
<b>NS. 9-12.3 Life Science</b>															
• Structure and function in living systems.	•	•	•		•	•	•	•	•	•	•	•	•		
• Populations and ecosystems.	•	•								•		•	•		
• Diversity and adaptations of organisms.										•		•	•		
<b>NS. 9-12.4 Earth &amp; Space Science</b>															
• Structure of the earth system.	•	•	•	•	•	•	•	•	•	•	•	•	•		
<b>NS. 9-12.6 Personal &amp; Social Perspectives</b>															
• Populations, resources, and environments.	•	•	•	•	•	•	•	•	•	•	•	•	•		
• Science and technology in society.	•	•													
<b>NS. 9-12.7 History &amp; Nature of Science</b>															
• Science as a human endeavor.	•	•							•	•	•	•	•		
• Nature of science.	•	•	•	•	•		•		•	•			•		
• History of science.	•	•		•				•					•		

National Education Standards  Technology and Language Arts	Cave & Karst Lessons and Activities														
	Interactive Reading Guide #1	Interactive Reading Guide #2	How Caves Form: A Webquest	The Rock Cycle Review	Making a Cave	Growing Speleothems	Speleothems: A Webquest	Sediments and Solution Caves: Part 1	Caves and Fossils	Sediments and Solution	Hidden Treasures	Porosity Mini-Lab	Porosity of Sediments	Cave Life: A Jigsaw Activity	Present a Cave
<b>Technology (Grades K-12)</b>															
NT.K-12.1 Basic Operations & Concepts															
• Students are proficient in the use of technology.	●	●	●					●							
NT.K-12.2 Social, Ethical, & Human Issues															
• Students practice responsible use of technology systems, information, and software.	●	●	●					●							
NT.K-12.3 Technology Productivity Tools															
• Students use technology tools to enhance learning, increase productivity, and promote creativity.	●	●	●					●							
NT.K-12.5 Technology Research Tools															
• Students use technology to locate, evaluate, and collect information from a variety of sources.	●	●	●					●							
<b>Language Arts (Grades K-12)</b>															
NL-ENG.K-12.1 Reading for Perspective															
• Students read a wide range of print and nonprint texts...to acquire new information.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
NL-ENG.K-12.7 Evaluating Data															
• Students...gather evaluate, and synthesize data from a variety of sources to communicate their discoveries in ways that suit their purpose and audience.												●	●		
NL-ENG.K-12.8 Developing Research Skills															
• Students use a variety of technological and information resources to gather and synthesize information and to create & communicate knowledge.												●			

# National Education Standards

## Math

### Cave & Karst Lessons and Activities

Interactive Reading Guide #1	Interactive Reading Guide #2	How Caves Form: A Webquest	The Rock Cycle Review	Making a Cave	Growing Speleothems	Speleothems: A Webquest	Sediments and Solution Caves: Part 1	Caves and Fossils	Sediments and Solution Caves: Part 2	Hidden Treasures	Porosity Mini-Lab	Porosity of Sediments	Cave Life: A Jigsaw Activity	Present a Cave	Cave Quiz Game
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### Math (Grades 5-8)

NM-ALG.6-8.2 Represent and analyze mathematical situations and structures using algebraic symbols.

- Explore relationships between symbolic expression and graph of lines, paying particular attention to the meaning of intercept and slope.

NM-ALG.6-8.3 Use mathematical models to represent and understand quantitative relationships.

- Model and solve contextualized problems using various representations, such as graphs, tables, and equations.

NM-ALG.6-8.4 Analyze change in various contexts.

- Use graphs to analyze the nature of changes in quantities in linear relationships.

### Math (Grades 5-8)

NM-ALG.9-12.4 Analyze change in various contexts.

- Approximate and interpret rates of change from graphical and numerical data.