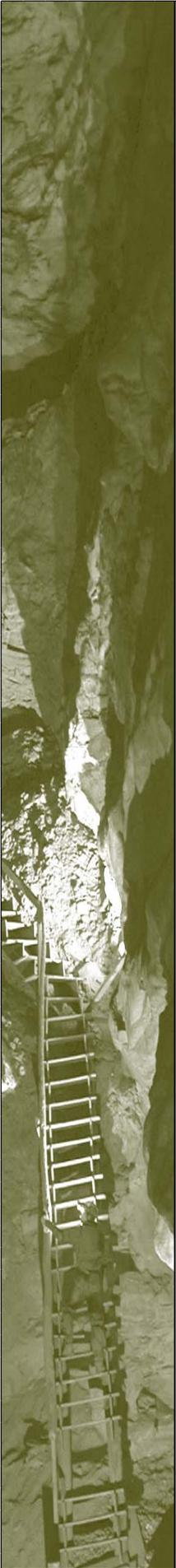


# Student Copy



NPS Photo by Rick Wood

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# Speleothems

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**Follow the directions below to access the “Views of the National Parks” Multimedia Education Program.**

- 1.) Open the “Views of the National Parks” program using a Views CD/DVD or the internet at: <http://www2.nature.nps.gov/views/#>
- 2.) Select the “Multimedia Version”
- 3.) Open the “Knowledge Centers”
- 4.) Click on “Caves and Karst”
- 5.) Enter the module by clicking on “Explore Caves and Karst”
- 6.) Click on “Underground” in the top menu bar
- 7.) Select the “Speleothems” side bar

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**Answer the following questions as you read through the speleothems section of the Caves and Karst Knowledge Center.**

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1. The one thing that all speleothems have in common is where they form. Explain how the water table influences the formation of caves and their speleothems.
  
  
  
  
  
  
  
  
  
  
2. What does the term “speleothem” refer to? Give an example.
  
  
  
  
  
  
  
  
  
  
3. What is the most common cave mineral?

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**Learn about 14 different types of speleothems by clicking on each type and then answering the following questions.**

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**1. Cave Balloons**

a. Complete the following sentence about cave balloons:

“Cave balloons are \_\_\_\_\_ - shaped, \_\_\_\_\_ - walled speleothems with \_\_\_\_\_ inside of a mineralized bag-like \_\_\_\_\_.”

b. Explain why cave balloons are so rare and fragile.

c. The picture shown is from Mammoth Cave National Park. Name another national park where you could find an impressive display of cave balloons?

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**2. Boxwork**

a. What does boxwork resemble?

b. What does a mineral need to be in order for it to create boxwork?

c. Boxwork is mostly composed of what mineral?

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**3. Cave Flowers**

a. What is the mineral that typically forms cave flowers?

b. Use the picture and text to name 2 national parks where you can find gypsum flowers.

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#### 4. Coatings

a. List 4 places in a cave that you could find cave coatings:

- 
- 
- 
- 

b. What type of cave mineral can form cave coatings? Be specific and use examples.

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#### 5. Columns

a. How is a column formed?

b. Why are the largest cave columns usually found along ceiling joints?

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#### 6. Coralloids

a. What does the term coralloid describe?

b. List 3 examples of speleothems that can be considered coralloids:

- 
- 
- 

c. Where can coralloids form?

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## 7. Draperies

- a. Describe the formation of cave draperies.
  
  
  
  
  
  
  
  
  
  
- b. What are 2 sources that can give draperies bacon-like stripes?

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## 8. Flowstone

- a. What is flowstone usually composed of?
  
  
  
  
  
  
  
  
  
  
- b. How are the minerals of flowstones deposited?
  
  
  
  
  
  
  
  
  
  
- c. Explain the difference between flowstone and coatings.
  
  
  
  
  
  
  
  
  
  
- d. Flowstones can resemble a petrified or frozen \_\_\_\_\_.

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## 9. Frostwork

- a. The needle-like habit of what type of mineral gives most frostwork their particular appearance?
  
  
  
  
  
  
  
  
  
  
- b. Frostwork is most commonly found with \_\_\_\_\_.
  
  
  
  
  
  
  
  
  
  
- c. Explain a downside to the dazzling beauty of frostwork.

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## 10. Helictites

- a. What is the Greek root for the term helictite, and what does it mean?
  
- b. What is the one thing that all helictites have in common?

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## 11. Moonmilk

- a. What does the milky appearance of moonmilk form from?
  
- b. What are 4 medicinal purposes of moonmilk?
  - 
  - 
  - 
  -

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## 12. Cave Pearls

- a. List 4 objects that cave pearls have been compared to:
  - 
  - 
  - 
  -
  
- b. Where do cave pearls normally grow?
  
- c. How do sand grains and bat bones influence the growth of cave pearls?

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### 13. Stalactites

- a. What do stalactites resemble and where are they found?
  
- b. What do all stalactites begin their growth as?
  
- c. Describe the first stage in the growth of a stalactite.
  
- d. What sticks or “adheres” the thin film of carbonate material left behind by a water droplet to the ceiling of a cave?
  
- e. As long as water continues to drip, what eventually develops and is enlarged by the dripping water?

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### 14. Stalagmites

- a. What are stalagmites?
  
- b. How does the splash of falling water droplets affect the growth of stalagmites?
  
- c. Describe the difference between the top of a stalagmite and the tip of a stalactite.