

# SPELEOTHEM MATCH

Adapted from: *Cave and Karst Curriculum and Resource Guide*  
American Cave Conservation Association, Inc. 1994

**GRADE LEVEL:** Intermediate /  
Secondary

**SUBJECT:** Science (Unifying  
Concepts, Physical)

**Related Colorado Content**

**Standards:** SC(7-12).4

**TIME:** 30 Minutes

**OBJECTIVE:** Students will practice  
learning the names of cave  
formations.

**MATERIALS:**

- Copies of Student Worksheet

**PROCEDURE:**

1. Hand out the student worksheet with all the formations and descriptions.
2. Discuss the formation definitions with the students.
3. Have the students match the numbered speleothems in the diagram to the definitions.

**BACKGROUND:**

Speleothem is the name given to any cave formation inside of a cave. Stalactites are speleothems that hang down from the cave ceiling, and stalagmites are speleothems that rise up from the cave floor.

Formation of any speleothem takes a long period of time. As each drop of water leaves a tiny amount of mineral residue on a cave ceiling, floor, wall or other feature, it adds to speleothem growth. When a speleothem is broken, it will not be replaced within our lifetime, if ever!

Therefore, people should be extremely careful while exploring caves.

# SPELEOTHEM MATCH

## Student Worksheet

**Aragonite Needles** – a cave mineral that often forms needle-like crystals.

**Cave Coral** – also known as “popcorn”, are small knobby clusters formed by seeping water.

**Column** – when a stalactite and a stalagmite grow together from the floor to the ceiling.

**Drapery** – a speleothem formed when water deposits calcite in thin sheets that hang in delicate folds.

**Flowstone** – resembling frozen waterfalls, form when water flows down walls, over floors and older formations, building up sheets of calcite like icing on a cake.

**Helictites** – small twisted structures projecting from ceilings, walls and the floor of caves that seem to defy the laws of gravity. Formed by seeping water, they project at all angles.

**Rimstone Dams** – steplike terraces along streams and on cave floors that enclose pools of water.

**Shields** – flat semi-circular calcite sheets formed by water seeping from a thin crack. Stalactites and draperies commonly decorate the edges of these rare speleothems.

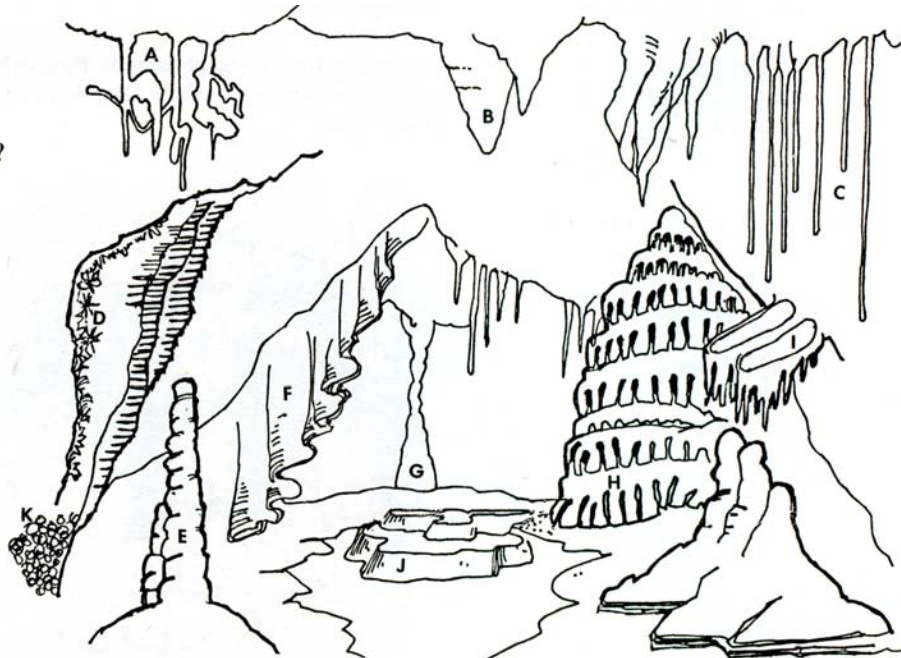
**Soda Straws** – thin hollow tubes that grow from the ceiling of caves as water runs down inside them and deposits rings of calcite at their tips.

**Stalactite** – speleothems that grow down from the ceiling. They form as calcite is deposited around the outside of soda straws after the centers of soda straws become plugged.

**Stalagmite** – speleothems that grow up from the floor, usually, formed by dripping water from stalactites above. They are more rounded on top than stalactites.

Can you match the Speleothems in this picture to the definitions?

- | Answers: |   |
|----------|---|
| 11.      | E |
| 10.      | B |
| 9.       | C |
| 8.       | I |
| 7.       | J |
| 6.       | A |
| 5.       | H |
| 4.       | F |
| 3.       | G |
| 2.       | K |
| 1.       | D |



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