Name: _____ Date: _____

Stalactites and Stalagmites: Drip by Drip

Circle group

Deep in some caves, stone icicles hang from the ceiling. Stone spikes rise from the floor. They look like a fantasy movie, but they are made by water and time.

Many caves form in limestone, a soft rock. Rainwater picks up a gas from the air and soil. This makes it a little acidic. The water trickles down through cracks in the limestone. It dissolves a bit of the rock and carries it along.

When a drop reaches the cave roof, it hangs there. Some of the gas escapes into the cave air. A tiny ring of rock is left behind. Then another drop comes, and another. Over thousands of years, the rings build a hollow stone tube that grows down. This is a stalactite.

Drops that fall to the floor also leave rock behind. A mound grows up toward the ceiling. This is a stalagmite.

To remember which is which, think of the c in ceiling. It starts stalactite. Sometimes the two meet and join into a column. They grow so slowly that visitors are asked never to touch them.

Questions

1. What kind of rock do many caves form in?

_____

_____

2. How does rainwater become a little acidic?

_____

_____

3. What is a stalactite?

_____

_____

4. How does a stalagmite grow?

_____

_____

5. Why are visitors asked not to touch cave shapes?

_____

_____

6. What forms when a stalactite and a stalagmite meet?

_____

_____

Words to know

limestone: a soft rock that water can slowly dissolve
acidic: able to slowly wear away certain kinds of rock
dissolves: mixes into a liquid and seems to disappear
trickles: flows in a thin, slow stream
column: a tall, thick pillar

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Stalactites and Stalagmites: Drip by Drip

Triangle group

Deep inside some caves, stone icicles hang from the ceiling, and stone spikes rise from the floor below. They look like they belong in a fantasy movie, but they are made by plain water and time.

Many caves form in limestone, a soft rock. Rainwater picks up a gas from the air and soil, which makes it slightly acidic. As this water trickles down through cracks in the limestone, it dissolves a little of the rock and carries it along.

When a drop reaches the roof of a cave, it hangs there for a moment. Some of the gas escapes into the cave air, and a tiny ring of dissolved rock is left behind. Another drop follows, and then another. Over thousands of years, the rings add up into a hollow stone tube that grows downward. This is a stalactite.

Drops that fall to the floor also leave rock behind. Slowly, a mound builds up and grows toward the ceiling. This is a stalagmite.

If you want to remember which is which, think of the letter c in ceiling, which starts the word stalactite. Sometimes the two meet in the middle and join into a single column. Because they grow so slowly, cave visitors are asked never to touch them.

Questions

1. What kind of rock do many caves form in?

_____

_____

2. How does rainwater become slightly acidic?

_____

_____

3. What is a stalactite?

_____

_____

4. How does a stalagmite grow?

_____

_____

5. Why are visitors asked not to touch cave formations?

_____

_____

6. What forms when a stalactite and stalagmite meet?

_____

_____

Words to know

limestone: a soft rock that water can slowly dissolve
acidic: able to slowly wear away certain kinds of rock
dissolves: mixes into a liquid and seems to disappear
trickles: flows in a thin, slow stream
column: a tall, thick pillar

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Stalactites and Stalagmites: Drip by Drip

Square group

Deep within certain caves, stone icicles dangle from the ceiling while stone spikes rise from the floor beneath them. They resemble scenery from a fantasy film, yet they are created by nothing more than ordinary water and an enormous amount of time.

Many caves develop in limestone, a relatively soft rock. Rainwater absorbs a gas from the air and the soil, which makes it slightly acidic. As this water trickles downward through cracks in the limestone, it dissolves a small amount of the rock and carries it along.

When a drop arrives at the ceiling of a cave, it clings there for a moment. Some of the gas escapes into the cave air, and a tiny ring of dissolved rock is left behind. Another drop follows, and then another. Over thousands of years, the rings accumulate into a hollow stone tube that lengthens downward. This formation is a stalactite.

Drops that land on the floor also deposit rock. Gradually, a mound builds and climbs toward the ceiling. This is a stalagmite.

To remember which is which, think of the letter c in ceiling, which begins the word stalactite. Occasionally, the two meet in the middle and fuse into a single column. Because they grow so slowly, cave visitors are asked never to touch them.

Questions

1. What type of rock do many caves develop in?

_____

_____

2. How does rainwater become slightly acidic?

_____

_____

3. What exactly is a stalactite?

_____

_____

4. How does a stalagmite grow?

_____

_____

5. Why are visitors asked not to touch cave formations?

_____

_____

6. What forms when a stalactite and stalagmite meet in the middle?

_____

_____

Words to know

limestone: a soft rock that water can slowly dissolve
acidic: able to slowly wear away certain kinds of rock
dissolves: mixes into a liquid and seems to disappear
trickles: flows in a thin, slow stream
column: a tall, thick pillar

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: Stalactites and Stalagmites: Drip by Drip

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: Stalactites and Stalagmites: Drip by Drip

Easier · 181 words · Flesch-Kincaid grade 3.2

1. Limestone.
2. It picks up a gas from the air and soil.
3. A stone shape that grows down from a cave ceiling.
4. Drops hit the floor and leave rock behind, so a mound grows up.
5. They grow very slowly, so harm would take a long time to heal.
6. A column.

Triangle: Stalactites and Stalagmites: Drip by Drip

This passage · 210 words · Flesch-Kincaid grade 5.2

1. Limestone.
2. It picks up a gas from the air and soil.
3. A stone formation that grows down from a cave ceiling.
4. Drops that hit the floor leave rock behind, building a mound that grows up.
5. They grow very slowly, so damage would take a very long time to repair.
6. A column.

Square: Stalactites and Stalagmites: Drip by Drip

Harder · 214 words · Flesch-Kincaid grade 7.2

1. Limestone.
2. It absorbs a gas from the air and the soil.
3. A stone formation that lengthens downward from a cave ceiling.
4. Drops landing on the floor deposit rock, building a mound that climbs upward.
5. They grow so slowly that damage would take ages to be repaired.
6. A column.