

Weathering

Use the words below to complete the passage about weathering.

| | | | | | |
|----------|----------|---------|-----------|----------|-------------|
| cold | roots | cracks | surface | chemical | stalactites |
| dissolve | breaking | freezes | particles | fungus | hot |

The Earth is constantly changing. Along with erosion and deposition, weathering is changing the Earth's surface every day. Weathering refers to the _____, or wearing down, of rocks. There are three types of weathering: physical weathering, biological weathering and _____ weathering.



Physical weathering is sometimes referred to as mechanical weathering and is generally characterised by the process of abrasion (scraping). An example of physical weathering is tiny _____ of sand blowing through the air and striking a rock formation. Similar to how sandpaper works, the particles of sand rub against the rock formation. This wears the rock down over time. Similarly, waves crashing against a rock wall will very slowly break down the rock. Rain can also cause weathering. Water collects within the _____ of a rock. When the temperature drops, this water _____ and in doing so, expands, causing the cracks to grow. When the water thaws, it reaches further into the cracks and the process repeats. A final example of physical weathering starts with rocks frozen within a glacier. The glacier moves slowly, rubbing the trapped rocks heavily against the ground, causing some of the rocks underneath the glacier to break. Physical weathering occurs more intensely in very _____ or very _____ environments.

Biological weathering is when rocks are broken down as a result of plants, animals and bacteria. An example of biological weathering is the _____ of a plant growing within the cracks of a rock and over time breaking the rock. Burrowing animals also contribute to the weathering of rocks. When animals burrow, they move fragments of rock closer to the _____. The fragments are then more exposed to environmental factors that can lead to weathering. _____ and algae growing on rocks can also release chemicals that cause rocks to break down.

Chemical weathering occurs when the composition of a rock changes. The processes of hydrolysis and oxidation can cause a number of changes to rocks. As an example, water can _____ the minerals within certain rocks. This is how limestone caves are formed. The dissolved minerals from the rocks form stalagmites and _____.

Find the Words!

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Y | B | B | I | O | L | O | G | I | C | A | L |
| X | H | R | Z | V | L | G | W | Z | B | H | S |
| W | A | W | C | Q | L | E | O | E | M | E | X |
| L | W | E | P | H | Y | S | I | C | A | L | N |
| I | I | A | B | R | E | A | K | R | X | R | F |
| D | N | T | V | U | N | M | V | D | F | Q | Q |
| O | D | H | E | E | V | F | I | J | D | G | L |
| W | W | E | L | S | S | Q | E | C | K | S | J |
| N | S | R | I | Q | H | I | V | S | A | S | Z |
| N | U | I | N | J | U | A | Y | E | L | L | B |
| E | R | N | R | Q | A | N | I | M | A | L | S |
| U | C | G | L | A | C | I | E | R | S | M | A |

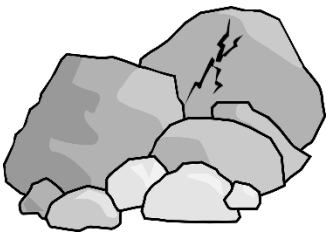
| | | |
|------------|----------|------------|
| weathering | physical | biological |
| break | glaciers | animals |
| wear | down | wind |
| | | chemical |

Weathering Answers

Use the words below to complete the passage about weathering.

| | | | | | |
|----------|----------|---------|-----------|----------|-------------|
| cold | roots | cracks | surface | chemical | stalactites |
| dissolve | breaking | freezes | particles | fungus | hot |

The Earth is constantly changing. Along with erosion and deposition, weathering is changing the Earth's surface every day. Weathering refers to the **breaking**, or wearing down, of rocks. There are three types of weathering: physical weathering, biological weathering and **chemical** weathering.



Physical weathering is sometimes referred to as mechanical weathering and is generally characterised by the process of abrasion (scraping). An example of physical weathering is tiny **particles** of sand blowing through the air and striking a rock formation. Similar to how sandpaper works, the particles of sand rub against the rock formation. This wears the rock down over time. Similarly, waves crashing against a rock wall will very slowly break down the rock. Rain can also cause weathering. Water collects within the **cracks** of a rock. When the temperature drops, this water **freezes** and in doing so, expands, causing the cracks to grow. When the water thaws, it reaches further into the cracks and the process repeats. A final example of physical weathering starts with rocks frozen within a glacier. The glacier moves slowly, rubbing the trapped rocks heavily against the ground, causing some of the rocks underneath the glacier to break. Physical weathering occurs more intensely in very **hot** or very **cold** environments.

Biological weathering is when rocks are broken down as a result of plants, animals and bacteria. An example of biological weathering is the **roots** of a plant growing within the cracks of a rock and over time breaking the rock. Burrowing animals also contribute to the weathering of rocks. When animals burrow, they move fragments of rock closer to the **surface**. The fragments are then more exposed to environmental factors that can lead to weathering. **Fungus** and algae growing on rocks can also release chemicals that cause rocks to break down.

Chemical weathering occurs when the composition of a rock changes. The processes of hydrolysis and oxidation can cause a number of changes to rocks. As an example, water can **dissolve** the minerals within certain rocks. This is how limestone caves are formed. The dissolved minerals from the rocks form stalagmites and **stalactites**.

Find the Words!

| | | | | | | | | | | | |
|------------|---|----------|----------|---------|---|------------|---|---|---|---|---|
| Y | B | B | I | O | L | O | G | I | C | A | L |
| X | H | R | Z | V | L | G | W | Z | B | H | S |
| W | A | W | C | Q | L | E | O | E | M | E | X |
| L | W | E | P | H | Y | S | I | C | A | L | N |
| I | I | A | B | R | E | A | K | R | X | R | F |
| D | N | T | V | U | N | M | V | D | F | Q | Q |
| O | D | H | E | E | V | F | I | J | D | G | L |
| W | W | E | L | S | S | Q | E | C | K | S | J |
| N | S | R | I | Q | H | I | V | S | A | S | Z |
| N | U | I | N | J | U | A | Y | E | L | L | B |
| E | R | N | R | Q | A | N | I | M | A | L | S |
| U | C | G | L | A | C | I | E | R | S | M | A |
| weathering | | | physical | | | biological | | | | | |
| break | | glaciers | | animals | | waves | | | | | |
| wear | | down | | wind | | chemical | | | | | |

