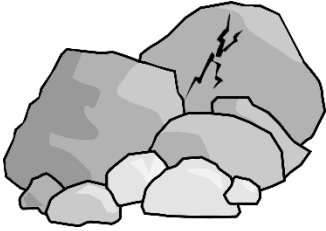


Weathering

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 _____ 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.

breaks it (weathering)

takes it (erosion)

drops it (deposition)

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

