Weathering

Use the words below to complete the passage about weathering.

	cold	roots	cracks	surface	chemical	stalactites	
	dissolve	breaking	freezes	particles	fungus	hot	
he Earth	is constantly c	hanging. Along	with erosion a	nd deposition, v	weathering is ch	nanging the Earth	ı'S

	dissolve	breaking	freezes	particl	es	fun	gus		hot	-		
The Earth	is constantly ch	nanging. Along	with erosion a	nd deposit	tion, we	eather	ing is	s char	nging t	he Ea	ırth's	
surface ev	ery day. Weath	ering refers to t	he	, or w	earing	down	, of r	ocks.	There	are th	ree ty	pes
of weathe	ring: physical w	eathering, biolo	gical weatheri	ng and			_ we	eather	ing.			
	Ph	ysical weatherin	ng is sometime	es referred	to as r	mecha	anica	l weat	hering	and	is	
	y ge	nerally characte	erised by the p	rocess of a	abrasio	n (scr	rapin	g). Ar	n exam	iple o	f physi	cal
	WE WE	eathering is tiny		of san	d blowi	ng th	rougl	h the	air anc	l strik	ing a r	ock
200-(for	rmation. Similar	to how sandp	aper work	s, the p	particle	es of	sand	rub aç	gainst	the ro	ck
formation.	This wears the	e rock down ove	er time. Similar	ly, waves	crashin	g aga	inst a	a rock	wall w	/ill ver	y slow	/ly
break dow	vn the rock. Rai	n can also caus	e weathering.	Water coll	ects wi	thin th	ne			of	a rock	<.
When the	temperature dr	ops, this water		and in	doing s	so, ex	panc	ls, cau	ısing tl	ne cra	acks to)
grow. Whe	en the water tha	aws, it reaches	further into the	e cracks aı	nd the I	proce	ss re	peats	. A fina	ıl exa	mple o	of
physical w	eathering starts	s with rocks fro	zen within a g	lacier. The	glacier	move	es slo	owly, r	ubbing	g the	trappe	:d
rocks hea	vily against the	ground, causing	g some of the	rocks und	erneath	the o	glacie	er to b	reak. I	^{>} hysic	cal	
weatherin	g occurs more	intensely in very	/	or ver	У			_ env	ironme	ents.		
Biological	weathering is v	vhen rocks are	broken down	as a result	of plan	ıts, ar	nimals	s and	bacter	ia. Ar	ı exam	ple
of biologic	cal weathering is	s the	of a pl	ant growir	ng withi	n the	crac	ks of a	a rock	and c	over tin	ne
breaking t	he rock. Burrov	ving animals als	o contribute t	o the weat	hering	of roc	cks. V	Vhen a	animal	s bur	row, th	iey
move frag	ments of rock of	closer to the		. The			ind	tho	Wor			
fragments	are then more	exposed to env	vironmental fa	ctors	Υ	ВВ		O L	0 G	1 C	A L	
that can le	ead to weatheri	ng	and alga	іе	X	H R	z	V L	G W	Z B	H S	
growing o	n rocks can als	o release chem	icals that caus	e rocks	L	W E	Р	н ү	S I	C A	LN	
to break c	łown.				ı	I A	В			R X	R F	
Chemical ·	weathering occ	urs when the co	omposition of	a rock	0	D H	E	E V	FI	D F J D	Q Q G L	
	· ·	of hydrolysis an			W	W E S R		SS QH	Q E I V	C K S A	s J s z	
· ·		rocks. As an exa			N	U I	N	Jυ	A Y	E L	L B	
	o o	erals within cer	•		E U	R N C G	R L	Q A A C		M A R S	L S M A	
how limes		formed. The dis			weath	ering		phys			ologica	ıl
		gmites and			breal	<	glaci	ers	anima	als	wave	:S
					we	ear	d	own	wind	c	hemical	I



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

