

## Paraphrasing – Chemical Weathering: Oxidation

**Paraphrasing** is restating published writing in your own words. It can be shorter or longer than the original writing. To paraphrase:

1. Identify the Main Idea.
2. Change the words and word order
3. Change the structure of the paragraph
4. Write about it in a different way.
5. Give examples of Oxidation.

You have probably noticed that no two rocks look exactly the same. Some look like they have been carved by a sculptor. Some look like they have been painted red, and others have been hollowed out to form caves. One of the reasons rocks look so varied in their appearance is because they are subjected to **Chemical Weathering, which is the process by which rocks are broken down by chemical reactions.** We mentioned that chemical weathering is a way in which rocks get broken down. **But it is important to emphasize that because there is an actual chemical change taking place, rocks are not just crumbled into smaller rocks; they are actually being chemically altered or changed.** In other words, after chemical weathering, we end up with a different substance than the one we started with. There are three types of Chemical Weathering. One is called **Oxidation.**

**Oxidation** is the **reaction of a substance with oxygen**. You are probably familiar with oxidation because it is **the process that causes rust**. So just like your car turns to rust through oxidation, rocks can get rusty if they contain iron. You may have noticed that rusted metal on your car is somewhat fragile; you could even poke your finger through a rust patch if it's big enough. This is because when iron reacts with oxygen, it forms iron oxide, which is not very strong. So **when a rock gets oxidized, it is weakened and crumbles easily, allowing the rock to break down**. Iron oxide is a kind of brownish-red in color, and this explains why some rocks look red.

[illegible]

## Paraphrasing – Chemical Weathering: Carbonation

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You have probably noticed that no two rocks look exactly the same. Some look like they have been carved by a sculptor. Some look like they have been painted red, and others have been hollowed out to form caves.

One of the reasons rocks look so varied in their appearance is because they are subjected to **Chemical Weathering, which is the process by which rocks are broken down by chemical reactions.** We mentioned that chemical weathering is a way in which rocks get broken down. **But it is important to emphasize that because there is an actual chemical change taking place, rocks are not just crumbled into smaller rocks; they are actually being chemically altered or changed.** In other words, after chemical weathering, we end up with a different substance than the one we started with. There are three types of Chemical Weathering. **Carbonation** is one of the types of Chemical Weathering.

**Carbonation** is the mixing of water with carbon dioxide to make carbonic acid. This type of weathering is **important in the formation of caves**. Dissolved carbon dioxide in rainwater or in moist air forms carbonic acid, and this acid reacts with minerals in rocks. The mineral **calcite**, which is common in **limestone**, is **particularly vulnerable to carbonation**. This mineral **dissolves** in the carbonic acid and gets washed away. This can hollow out the rock and leave behind a cave.

[illegible]

Name: \_\_\_\_\_ Class: \_\_\_\_\_

Peer Review Writing Project

Component	0	1	2	3
Identifying Main Idea	No project was submitted.	Identifies main idea, but is not accurate	Identifies main idea, mostly accurate.	Identifies main idea, accurately.
Quality of Writing	No project was submitted.	Writing assignment contains many grammar and spelling mistakes.	Writing assignment contains some grammar and spelling mistakes.	Writing assignment contains no grammar or spelling mistakes. Story is well organized.
Paraphrasing	No project was submitted.	Most sentence structures are reconstructed in own words.	All sentences structures are reconstructed in own words	Both sentence structures and paraphrase structures are reconstructed.
Scientific Examples	No project was submitted.	Incorrect examples are provided.	Correct examples are provided, but they are general.	Correct examples are provided and they are detailed.
Peer Comments:	Grow:		Glow:	
Student Reflection:	Feedback I found useful and why:		Strategies to Improve (Next Steps):	
			Total Points:	



