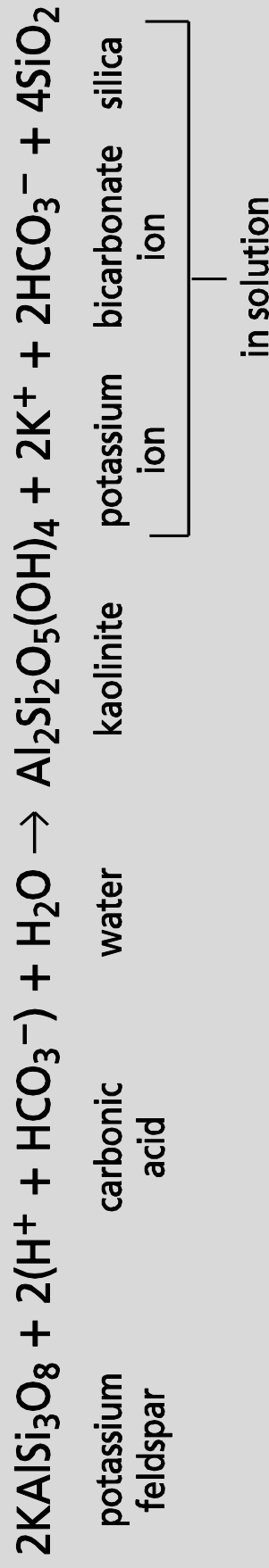
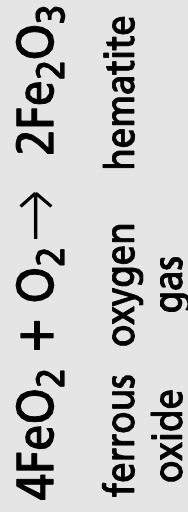


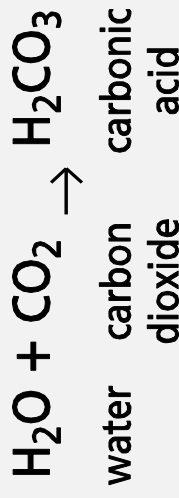
Hydrolysis



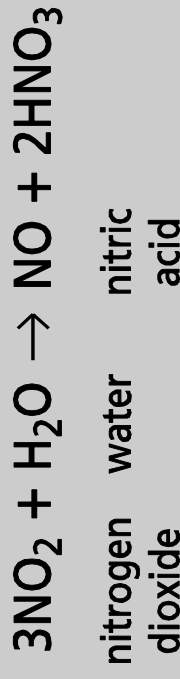
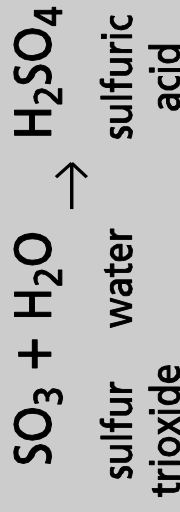
Oxidation



Carbonic Acid Formation



Acid Precipitation Formation



NAME _____

CHEMICAL WEATHERING

1. What is chemical weathering? _____

2. What is hydrolysis? _____

3. According to the chemical equation, what happens to potassium feldspar during hydrolysis?

4. How is carbonic acid formed, and what is its role in chemical weathering?

5. What substances react and form during oxidation?

6. Which chemical processes shown involve carbonic acid?

7. What substances react during the formation of acid precipitation?

8. What products result from acid precipitation formation?

9. Which chemical processes shown involve H₂O?

Teacher Guide and Answers

Teaching Transparency 16 – Chemical Weathering

1. Chemical weathering is the process by which rocks and minerals undergo changes in their composition as the result of chemical reactions.
2. Hydrolysis is the reaction of water with other substances.
3. It reacts with water and carbonic acid to form kaolinite and, in solution, potassium ions, bicarbonate ions, and silica.
4. Carbonic acid is formed from the reaction of carbon dioxide and water. It reacts with minerals such as calcite in limestone to dissolve rocks.
5. During oxidation, ferrous oxide reacts with oxygen gas to form hematite.
6. hydrolysis and the formation of carbonic acid
7. Sulfur dioxide and nitric oxide react with water.
8. sulfuric acid and nitric acid
9. hydrolysis, acid precipitation formation, and the formation of carbonic acid