

Weathering & Erosion (p. 756 - 761)

I. Physical Weathering

1. Define the term mechanical weathering.

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Mechanical Weathering - weathering in which rocks are broken into smaller pieces, but no change occurs chemically

2. List three types of mechanical weathering.

- 1. Abrasion
- 2. Ice-Wedging
- 3. Plants

(particle suspension in air/water)

- ④ Lightning
- ⑤ Heating/Cooling
↓
"Hot Roads"

3. Weather occurs at a constant rate equally throughout the world.

Circle One : True False

Washington vs. Arizona

II. Chemical Weathering

1. Define the term chemical weathering.

Chemical Weathering - weathering in which rock is broken down because of chemical reactions with the environment

2. Sometimes it takes millions of years to see the effects of chemical weathering.

Circle One : True False

3. What forms when carbon dioxide reacts with rainwater?

Carbonic Acid

Moss/Plants
↳ release acids

4. What formation does carbonic acid form when it comes into contact with limestone?

Caves

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5. Define the term hydrolysis.

Hydrolysis - change in the composition of minerals when they react chemically with water (Ex. Aluminum ores)

6. How does acid precipitation form?

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When fossil fuels are burned, sulfur dioxide + nitrogen oxides are released and react with water in clouds (Sulfuric acid, nitric acid)

7. Why have some companies installed scrubbers in their factories?

- Remove sulfur dioxide before it reaches the air.

Clean Air Act (1970)