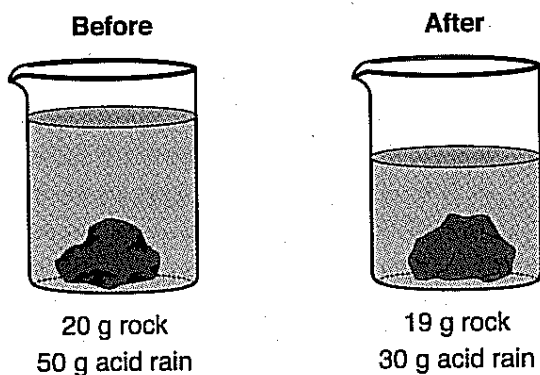


Chemical Properties Notes

1. Chemical Property – characteristic that gives a substance the ability to undergo a change that results in a new substance
2. Chemical Change – change in the identity of a substance due to its chemical properties
3. Chemical Property Examples:
 - a. Flammability - burning of a substance
 1. Example: wood burns to become ash, gas, and smoke
 - b. Reacts with Oxygen - iron reacts with oxygen causing corrosion changing to a new substance, iron oxide
 - c. Reacts with Sulfur - silver reacts with sulfur in the air developing tarnish
 - d. Reacts with Heat – eggs, sugar, flour, and stuff baking to become a cake
 - e. Reacts with Light – fruits and vegetables reacting with light will turn brown
 - f. Other Properties: reacts with vinegar, electricity, cold
4. Signs of a Chemical Change – bubbles, heat, light, smoke, sound, and color change
5. Law of Conservation of Mass – states that the mass of what you end with is always the same as the mass of what you start with.
 - a. EX: If you could measure the mass of the oxygen and all of the original firewood that was burned and compare it to the remaining mass of the ash, smoke, and gas, they would be equal.
 - b. Mass is not destroyed or created during any chemical change.

Benny is conducting an experiment on environmental pollution. He is concerned that the rock formations in a nearby park are being damaged by acid rain. To test his hypothesis, he puts a rock into a beaker that is filled with acid rain and measures it after one week. The solid reacts with the liquid to give off a gas.



How much gas is released?

- A 11 grams**
- B 21 grams**
- C 59 grams**
- D 70 grams**

Before total is 70 g

After total is 49 g

To determine the amount of gas, subtract 49 from 70 to get 21 g.

