

Unit 4: Chemical Reactions

Lesson 15: Spare Change

Guiding Question: Explain the differences between physical and chemical changes.

Do Now:

How could you group these different phenomena?











Notes

- Chemical equations represent changes in matter using symbols and formulas. They also indicate what state of matter each chemical is in. Recall (s) = <u>solid</u>, (l) = <u>liquid</u>, (g) = <u>gas</u>, and (aq) =<u>aqueous</u> (dissolved in water).
- These equations allow you to see what is happening to matter at an atomic level.
- They do not tell you how fast the change will happen, if it will happen at all, nor all of the things you may observe (color changes, heat, fire, etc.)



- <u>Physical Change</u>: A change in matter in which a substance changes form but not identity.
- Examples:
 - Torn Paper
 - Chopped Wood
 - Salt in Water



- <u>Chemical Change</u>: A change in matter that results in the formation of a new substance or substances with new properties.
- Examples:
 - Fried Egg
 - Moldy Bread



• What would you expect to observe in the following reaction based on the information given?

 $CoCl_2(aq) + Ca(OH)_2(aq) \rightarrow Co(OH)_2(s) + CaCl_2(aq)$



- Achieve 3000: "The Missouri gets a Makeover" due Friday 3/23 at 11:59pm
- Turn in you Chromatography PT to the bin on your way out
- Benchmark #3 on 3/28 & 3/29
- Homework #5 due Friday, 3/23
 - This will be handed out tomorrow (Tuesday)