Unit 4 - Week 30: Chemical Reaction Videos

Essential Question: What happens during a chemical reaction?

Objectives:

1. You will be able to identify evidence of a chemical reaction.
2. You will be able to write balanced chemical equations from word equations.

Vocabulary: reactant, product, chemical reaction, precipitate, state of matter, aqueous

Reactants: the substances present before the chemical reaction takes place, (the ones that ***react***)

Products: the substances present after the chemical reaction takes place, (the ones that are ***produced***)

Evidence that a **chemical reaction** has taken place:

- unexpected color change
- change in energy
- formation of a gas
- formation of a precipitate

Observation	Classification	Special Information	Example
1. After mixing two substances together, **bubbling** occurs.	Formation of a gas	Do NOT confuse this with heating up a substance and observing bubbles. This is a PHYSICAL change of boiling.	Hydrogen peroxide on a cut
2. After mixing two substances together or heating a substance, a new **smell** is detected.	Formation of a gas	A "new" smell is different from the original smell.	Cooking pancakes (or any baking)
3. After mixing two liquids together OR heating a single liquid, a **solid** is formed.	Formation of a precipitate	Notice how unexpected it is that you would heat a liquid and it would turn to a solid – usually it would turn to a gas.	Cooking pancakes (or almost any baking)
4. After mixing two substances together or heating a substance, the **color changes** unexpectedly.	Unexpected color change	If you mix blue and yellow together, you get green. This is NOT unexpected.	When you add heat to eggs, they turn from clear to a white color.
5. When you take the temperature before and after mixing two substances, a change in **temperature** is observed.	Change in energy	Temperature can go up or down.	Mixing table salt and water causes the temperature to drop.
6. When you mix substances together or light it on fire, it **produces light**.	Change in energy		Fireworks