

NB Page 85: Physical or Chemical?

5 Warning signs of a chemical reaction

- New gas formed (bubbles)
- Solid appears/ gets cloudy (PRECIPITATE)
- Change temperature
- Change color
- New substance with different properties

What was done	What happened	Evidence of new substance	Physical/ Chemical?
Cut metal with a knife	It is in two pieces	2 pieces	Physical
Oxidation: Li metal exposed to air	Gray/black coating On metal (instant rust?)	Color change	Chemical
Magnesium flare Burn magnesium ribbon-	bright light given off; white ashes remain	White ashes; light is given off; heat	Chemical
Dissolving: mix powder into water	Copper chloride dissolves in water- it turns blue	None- blue color was from powder	Physical
Electrolysis: battery to water set-up	Bubbles of oxygen and hydrogen come off of thumbtacks	Bubbles are new gas formed	Chemical
Aluminum foil in Copper chloride	Red precipitate; heats up; starts to bubble (Hydrogen gas); changes color from blue to clear;	Red precipitate; starts to bubble (Hydrogen gas); changes color from blue to clear	Chemical
Insulation: Poly A and Poly B	Bubbles; foam; heat; grows in size; turns solid	Bubbles; foam; heat; grows in size; turns solid	Chemical
Separate mixture: iron filings in sand	Iron filings stick to magnet	None- iron was in the sand mixture already	Physical
Campfire cooking: marshmallow in flame	Catches fire; smells; turns black; gooey inside; crunchy outside	Smell is a new property; changes color;	Chemical
Oobleck: Corn starch in water	Mixture that is runny	None	Physical
Iodine in oobleck: add iodine drops	Turns purple/ black	Color change	Chemical