

**Hypothesis:** If the procedures are correctly followed, then the student will distinguish between chemical and physical changes.

**Materials:**

1 Glow stick, 1 piece Ice, 1 Candle, 1 piece of Modeling clay, 1 Match, 1 piece of Foil, Salt, 15 mL of water, 1 Brillo pad, Baking soda, Pipette of Vinegar, Pipette of Hydrogen Peroxide, 1 slice of Liver, Dye, 1 Animal Cracker, Pea Size amount Anti-acid, Cup, Beaker, stirring rod, Petri dish, Safety goggles (4-5 each student)

**Procedure: (After Lab-Clean up: Throw away liver, candle, match; clean plastic & glassware; save foil, clay, plastic & glassware)**

Member Role/Duty	Student Name
Time Keeper: watch time for timed instructions/Manager: manage time wisely to be sure that all procedures are done/Noise Controller: control group volume to a library inside voice	
Instruction Reader: read each procedure /Data Recorder: record time and data observations	
Material Handler: Gather materials & Pass to experimenters	
Experimenter #1: follow and perform all procedures.	
Experimenter # 2: follow and perform all procedures.	
Reaction	Procedure
Glow stick	Demo: Activate closed system
Melting Ice	Record melting time of ice Melting <i>Time</i> : _____ mins.
Burning a Candle	1. Secure candle in modeling clay on piece of foil. 2. Light candle with match. 3. Observe for 1 min. & blow out flame
Dissolving Salt/Water	Add 15 mL of water to cup of salt.
Crushing Steel Wool	Carefully crush steel wool into a tight ball. (Caution: Steel fibers may cause splinters)
Baking Soda/Vinegar	Pour vinegar into cup of baking soda.
Liver/Hydrogen Peroxide	1. Place liver on Petri dish. 2. Squeeze hydrogen peroxide out of pipette onto piece of liver.
Dye/Water	Add dye to cup of water
Animal Cracker/Digestion	1. Pass out 1 animal cracker to each student of group. 2. Chew for 1 min. then swallow.
Anti-Acid/Water	Add anti-acid to cup of water