| “Frankenstein’s Hand” lab |
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| Science Inquiry Ms. Clark October 31, 2012 |
| Goals / Objectives |
| Students will use measurement skills to mix a chemical base with an acidic base in order to understand properties of gas. |
| Standard |
| **SCI.6.1 2010 - Physical Science**  Explain that all objects and substances in the natural world are composed of matter in different states with different properties. (6.1.1, 6.1.2, 6.1.3) Understand that there are different forms of energy with unique characteristics. (6.1.4, 6.1.5, 6.1.6, 6.1.7) |
| Materials / Supplies |
| * Plastic cups * Baking soda * Vinegar * Tbs. & tsp. measuring spoons * Rubber gloves |
| Estimated Time Needed: |
| One class period |
| Safety Statement: |
| This is a safe experiment with very little risk of injury. |
| Activity/Process |
| Introduction **Vocabulary for Science Notebook**   * carbon dioxide * chemical reaction * reactants * endothermic   **Research Questions for Science Notebook**   * What do you think will happen when baking soda and vinegar come in contact (what will be produced)? * What do you think will happen to the balloon attached? * Why does the balloon stop blowing up (why does the reaction stop)?     **Experimental Procedure**   1. Allow students to use red and blue Sharpie markers to create “veins” on the glove. 2. Measure 3 Tbs. vinegar and pour into cup. 3. Measure 2 tsp. baking soda and pour into the glove, shaking it into the fingers. 4. Attach glove to the top of the cup. 5. Pull the glove upright by its fingertips and shake gently, allowing the baking soda to drop into the cup. 6. Observe as the chemicals react! 7. Record observations in Science notebook. |
| Reflection / Follow activity |
| **What Happened:**  The bubbles that form are carbon dioxide gas. A chemical reaction occurs between the vinegar (an acid) and the baking soda (a base).  (This is also what makes cakes and quick breads (the no yeast kind) get nice and fluffy.)  **Follow up activity:**  Pass out the States of Matter worksheet and have students complete. |

