**Investigation 1: Matter in Motion**

**Reactants: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Question:** What will happen when you put the food coloring into the cups of hot and cold water? Will it react the same in both cups?

**Hypothesis:**

***Step 1 directions*:** Drop 2 drops of one food coloring into the hot water, and then drop 2 drops of the other food coloring into the cold water.

**Observations** (what do you see happening):

**Make an Inference** (explain why):

**Step 2 directions:** Now pour half of the cold liquid and half of the hot liquid into the empty cup and stir together.

**Observations** (what do you see happening):

**Is this a physical or chemical change? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Explain your reasoning**: