SCIENCE BACKGROUND
Matter is anything that has mass and takes up space. Different kinds of matter exist and many of them can be either solid or liquid, depending on temperature. Matter can be described and classified by its observable properties. Measurements of a variety of properties can be used to identify materials. When two or more different substances are mixed, a new substance with different properties may form. This is considered a chemical reaction, which is a change that results in one or more new substances. A physical reaction does not result in a new substance.

I CAN STATEMENT
• I can plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.
• I can conduct an investigation to determine whether the mixing of two or more substances results in a new substance.

INGREDIENTS
• 1 Cup of Water
• 1 Cup of Rubbing Alcohol
• 1 Dollar Bill
• Tongs
• Grill Lighter

INSTRUCTIONS
STEP 1: Mix the water with the rubbing alcohol. Describe and classify the water and rubbing alcohol mixture by its observable properties.
STEP 2: Using the tongs, dip the dollar bill into the water and rubbing alcohol mixture, for 30 seconds.
STEP 3: Holding the dollar bill with the tongs, use the grill lighter to ignite the dollar bill, and observe. What new substance(s) form when burning the alcohol?

EXPLANATION
Combustion or burning occurs between the alcohol and oxygen, which is a chemical reaction. During combustion a hydrocarbon and oxygen react to form carbon dioxide, water, and energy in the form of heat. The rubbing alcohol is what burns when you ignite the dollar bill. The temperature at which alcohol burns is not hot enough to evaporate the water, therefore the dollar bill remains wet and does not catch on fire. Water is very good at absorbing heat without increasing in temperature.