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. Matter of any type can be subdivide into particles that are too small to see, but even then the matter still exists and can be detected by other means.

I CAN STATEMENT
✓ I can plan and conduct an investigation to describe and classify different kinds of matter by their observable properties.
✓ I can develop a model to describe that matter is made of particles too small to be seen.

INGREDIENTS
- Hardboiled Egg
- Glass Jar (Make sure the mouth of the glass jar is slightly smaller than the egg.)
- Matches

INSTRUCTIONS
STEP 1: Have an adult ignite five matches and immediately place the matches into the glass jar or chimney.
STEP 2: Quickly place the egg or Santa on the opening of the glass jar and observe. Describe the egg by its observable properties. Explain how the air inside the glass bottle can be used as a model to describe that matter is made of particles too small to be seen.

EXPLANATION
The fire inside the glass bottle heats the air inside, causing it to expand, increasing the air pressure. Once the fire goes out, due to the lack of oxygen, the air inside the glass jar cools and compresses, causing the air pressure inside to decrease. The higher pressure outside of the glass jar pushes the egg or Santa into the glass jar or down the chimney.