SODA CAN SHAKE

SCIENCE SAFETY

PLEASE follow these safety precautions when doing any science experiment.

- **ALWAYS** have an adult present.
- **ALWAYS** wear the correct safety gear while doing any experiment.
- **NEVER** eat or drink anything while doing any experiment.
- **REMEMBER** experiments may require marbles, small balls, balloons, and other small parts. Those objects could become a CHOKING HAZARD. Adults are to perform those experiments using these objects. Any child can choke or suffocate on uninflated or broken balloons. Keep uninflated or broken balloons away from children.

INGREDIENTS

- 2 Cans of Regular Soda
- Transparent Cup

INSTRUCTIONS

STEP 1: Pour one of the cans of regular soda into the transparent cup. Describe the soda by its observable properties.
STEP 2: Excite the carbon dioxide gas bubbles, inside the other can of soda, by rapidly shaking the can.
STEP 3: Place the can of soda on a flat surface and tap the side of the can, several times.
STEP 4: Carefully and slowly open the can of soda and observe. What happens? Explain how the can of soda can be used as a model to describe that matter is made of particles too small to be seen.

EXPLANATION

By tapping the side of the can several times, you dislodge the carbon dioxide gas bubbles from the walls of the can, to the top of the can. When the can of soda is opened, the carbon dioxide gas bubbles rush out, and the soda stays in the can.

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.

NEXT GENERATION SCIENCE STANDARDS CONNECTION

2 – Structure and Properties of Matter I Patterns
5 – Structure and Properties of Matter I Scale, Proportion, and Quantity