



COLLAPSING CAN

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

- Empty Soda Can
- Hot Plate
- Bowl
- Water
- Ice
- Tongs

INSTRUCTIONS

STEP 1: Fill the bowl with ice and water.

STEP 2: Place one tablespoon of water into the empty soda can. Turn on the hot plate, to high, and place the soda can on the hot plate.

STEP 3: Wait a few minutes for water vapor to appear above the can.

STEP 4: Using the tongs, grasp the sides of the soda can, quickly flip the soda can, and dip it immediately into the cold water. Make observations and explain how this process is similar to how the sunlight on Earth's surface creates weather.

EXPLANATION

When the soda can is turned upside down and submerged into the cold water, the water vapor inside the soda can is cooled and condenses. This decreases the air pressure on the inside of the soda can, causing the higher pressure on the outside of the soda can to crush the soda can.



SCIENCE BACKGROUND

Sunlight warms Earth's surface. Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time. Clouds form on Earth when warm, moisture air rises and cools to the dew point. Water vapor then condenses on tiny particles in the air like smoke and dust, forming a cloud. An area of sinking air is called a high pressure, which usually brings nice weather. An area of rising air is called a low pressure, which usually brings unsettled weather. Meteorologists measure various weather conditions to describe and record the weather and to notice patterns over time.

I CAN STATEMENT

- ✓ I can make observations to determine the effects of sunlight on Earth's surface.

NEXT GENERATION SCIENCE STANDARDS CONNECTION

- K – Weather and Climate

