



BALLOON IN A BOTTLE

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

- Balloon
- Water Bottle

INSTRUCTIONS

STEP 1: Pour the water out of the water bottle. Describe the water by its observable properties.

STEP 2: Insert the balloon into the water bottle and pull the neck of the balloon over the outside of the bottle. Describe the air, inside the empty water bottle, by its observable properties.

STEP 2: Place your mouth over the opening of the empty water bottle and attempt to inflate the balloon. Describe how attempting to inflate the balloon inside the water bottle can be used as a model to describe how matter is made of particles too small to be seen.

EXPLANATION

The air inside the empty water bottle gets trapped when the balloon is placed over the outside of the bottle. When you attempt to inflate the balloon, the trapped air inside the bottle, prevents you from inflating the balloon.



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
5 – Structure and Properties of Matter

