LOVE POTION FLOWER

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

- Phenolphthalein
- Ammonia
- White Artificial Flower
- Spray Bottle

INSTRUCTIONS

STEP 1: Saturate the white artificial flower in phenolphthalein, allow the artificial flower to dry. Describe the phenolphthalein by its observable properties.

STEP 2: Fill the spray bottle with ammonia. Spray the ammonia onto the artificial flower and observe. Describe and classify the ammonia by its observable properties. How can the phenolphthalein be utilized to make observations and measurements to identify materials based on their properties?

EXPLANATION

Phenolphthalein is a PH indicator, which is a substance that indicates the degree of acidity or basicity through a color change. When you spray the ammonia onto the white artificial flower, which was previously saturated with phenolphthalein, the flower turned a bright pink. This indicates the ammonia is a base.

Hooked on SCIENCE

SCIENCE BACKGROUND

Matter is anything that has mass and takes up space. Matter can be described and classified by its observable properties. Measurements of a variety of properties can be used to identify materials. Different properties are suited to different purposes. Scientists use a pH scale to measure the strength of acids and bases, which can be used to identify materials. A pH indicator, indicates the degree of acidity or basicity through a color change. The pH scale ranges from 0-14. A substance with a pH of less than 7 is an acid and has a sour taste. A substance with a pH of more than 7 is a base and has a bitter taste.

I CAN STATEMENT

- ✓ I can plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.
- ✓ I can make observations and measurements to identify materials based on their properties.

NEXT GENERATION SCIENCE STANDARDS CONNECTION

2 – Structure and Properties of Matter
5 – Structure and Properties of Matter