



## CUPID'S BALLOON CHALLENGE

### 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

- 32" Bamboo Skewer
- Red Heart Balloon

### INSTRUCTIONS

**STEP 1:** Blow up the red heart balloon, let some of the air out of the balloon, and then tie a knot at the end. Describe the balloon by using its observable properties.

**STEP 2:** Gently twist the 32" bamboo skewer into the thick part of the red heart balloon, near the knotted end. Continue to slowly push the skewer through the balloon, until you push the skewer through the thick end of the balloon, opposite the knot, stop, and observe. Explain how the balloon can be used, as a model, to describe that matter is made of particles too small to be seen.

### EXPLANATION

The red heart balloon is made up of polymers, which are a bunch of molecules linked together, to form long chains. These long chains link up around the skewer, keeping the air from escaping.



### 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 | Patterns | Cause and Effect

5 – Structure and Properties of Matter | Scale, Proportion, and Quantity