



Science Fair Projects

Pre-K to 2nd Grade

<u>Air (expand and contract)</u>
Purpose To blow up a balloon without blowing into it.
Materials Empty 2-liter soft-drink plastic bottle, balloon, hot water, ice, deep bowl, and record page.
Experiment Put the balloon over the mouth of the bottle. Draw balloons on the record page to show what you think will happen when you put the bottle in hot water and in ice. Hold the bottle down in a bowl of hot water. What happened? Empty the hot water from the bowl and fill it with ice. What happened? Record the actual results on the prediction page. Fill in the page as follows: The hot water made the balloon _____. The ice made the balloon _____. <i>Results:</i> The air in the bottle was warmed by the hot water. Warm air expands. This made the balloon inflate. The ice cooled the air in the bottle. Cool air shrinks. The balloon deflated.

This project is from Daryl Vriesenga's book, *Science Fair Projects, Grades 1-3*, Michigan, Schaffer Publications, 1992. The Guide is available on line at: SchooDoodle.com