**Shrink a Balloon**

**DESCRIPTION:**   
When a balloon is placed in liquid nitrogen the air inside it is condensed from the cold (-196°C), causing the balloon to shrink. Once the balloon is removed it will regain its size as the air heats up. Liquid nitrogen boils at room temperature. The "fog" that we see is condensed water vapor though, not nitrogen gas.

**TOPICS COVERED:**- cryogenics  
- gas laws  
- physical change   
- vaporization  
- condensation

**MATERIALS NEEDED:**- liquid nitrogen  
- blown up balloon  
- tongs

**PROCEDURE:**1. Place the balloon in the liquid nitrogen  
2. Once it is shrunk, use the tongs to place it on the bench top

**ADDITIONAL COMMENTS:**This is a great one to do in front of an audience or as a hands on activity.

**SAFETY:**   
Liquid nitrogen is a cryogenic hazard and cause severe skin burns. Safety goggles should be worn at all times.

**STORY:**   
Bet the students you can shrink a balloon without touching it or popping it.