

California State University of Bakersfield, Department of Chemistry

# **Fog Chamber**

# Standard:

<u>MS-PS1-2</u>. Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.

#### Introduction:

In this experiment we will create instant fog while learning how it is formed!

#### Materials:

- One 1 gallon (3.S liters) clear glass or plastic jar with a wide mouth (a pickle jar works well).
- A rubber glove (Playtex<sup>TM</sup> brand works well).
- Matches.
- Tap water.
- Adult help.

# Safety:

- Always have an adult with you to help you during your experiment.
- You will be working with fire so be sure to wear the proper protection.

# **Procedure:**

- 1. Fill the very bottom of the jar with water.
- 2. Light a match and throw it into the jar.
- 3. Grab glove and place over mouth of jar sealing it. (fingers should be in jar)
- 4. Pull up on glove while keeping glove sealed.
- 5. While you pull the fog will form right before your eyes!

# **Data and Observations:**

Record your observations in this space

What did you see? Anything you were not expecting? Something really awesome? Describe it here.

# **Questions:**

Why is it that the smoke from the match reacted the way it did?

Does the amount water in the jar have an effect on the experiment?

What role does the pulling of the glove play in this reaction? Explain

#### **References:**

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1. Exploratorium.com

http://www.exploratorium.edu/snacks/fog\_chamber/index.html

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