## **ALL ABOUT BUBBLES**

### **Purpose:**

Engage in an inquiry (<u>www.inquiry.uiuc.edu</u>) activity to generate observations that will become testable questions.

#### **Materials:**

- ✓ Soapy solution (~ 20 ml dish detergent / 1 L H<sub>2</sub>O)
- √ 1 drinking straw for each group member
- ✓ 2 sheets of notebook paper
- ✓ 1 pencil or pen
- ✓ 1 Container (shallow dish or pie pan) to pour liquid into for bubble blowing
- ✓ PAPER TOWELS
- ✓ Dry Ice (optional, if time allows)

#### **Directions:**

- ✓ Form groups of four
- ✓ Select a recorder
- ✓ Recorder's responsibility? Write down all remarks from the group DURING the activity.
- ✓ Remaining members will blow bubbles using straws
- ✓ Pour the solution, slowly, into the container provided until it is ~ 2 cm deep
- ✓ You have two minutes to make bubbles as a team.
- ✓ Facilitator will stop your group after 2 minutes
- ✓ START BLOWING BUBBLES
- ✓ Raise and record any and all questions, statements, and/or observations being stated by your group about the bubbles they are making
- ✓ STOP: The facilitator now asks the groups to pick one response that the group considers the most interesting
- ✓ PUBLICLY DISCUSS how you can turn the statement into a testable question.
- ✓ ASK:
  - What are you trying to find out?
  - What are you changing?
  - What are you expecting to change?
  - What would you have to measure to know it did change?
  - What tool would measure this type of change?
- ✓ State what equipment you would need to conduct such a test.
- ✓ State who could help you conduct the test.
- ✓ If time permits, list a set of steps you could follow to conduct the test.
- ✓ Be ready to share with the group.

# Imagine....

this all came from blowing some bubbles?

What else could you use to spark the imagination?