

Name : \_\_\_\_\_ Date : \_\_\_\_\_ Period: \_\_\_\_\_

### Dry Ice: Simply Sublime: Part One

**Warning: Handle Dry Ice with caution. It can quickly freeze your skin! Anyone playing during the lab activity will not be allowed to participate.**

1. Take a chunk of dry ice, no bigger than 4 cm across. Place it in a styrofoam cup and experiment with it. Record what you see.
2. Break the chunk of dry ice up into smaller pieces by poking it with a pen or pencil. Cover the opening of the cup with a piece of plastic wrap. Record what you observe.
3. How do you explain your observations so far? What is "Dry Ice"? What is it doing?
4. Light a candle, and carefully pour the "air" from your cup onto the flame. Do not let any solid dry ice come out. What happens?
5. How would you explain this?
6. Add water to your cup. What do you observe?

### Dry Ice Puzzlers

1. When you pour the gas from the dry ice onto the candle, why does it go down?
2. If the gas from dry ice is colorless and clear, why does it form clouds of white vapor, especially when you blow on it?
3. When you add dry ice to water, it seems to boil. Why is that?
4. The dry ice in water "pops" every once in a while. Explain what is happening.
5. Does the dry ice disappear more quickly in air or in water? Can you explain why?
6. What temperature do you think the dry ice is?
7. In the Bubble Chamber, air bubbles floated. Can you explain why?
8. Is Dry Ice a good name for this material? Why or why not?