

Cold Pack Chemistry

Name: _____

Student worksheet

Date: _____

Directions: Complete each section as described.

1. Define the criteria and constraints for your cold pack.

a. Criteria:

b. Constraints:

Name: _____

Name: _____

- [illegible]

Cold Pack Chemistry—Page 3

Name: _____

3. Use this space to make a graph of the temperature change vs. the concentration. Make sure you label the axes of your graph and their units. If you tested more than one chemical reaction, include data for all the reactions on a single graph and add a legend.

4. Do you need to revise or update your criteria and constraints based on your experimental results? If so, explain those changes here.

a. Changes to criteria:

b. Changes to constraints:

5. Make a recommendation for a cold pack using your data.

a. What chemical reaction do you recommend?

b. What concentration of the chemicals do you recommend?

c. Justify your answer using your data.

Cold Pack Chemistry—Page 5

Name: _____

6. Draw a design for your cold pack. Make sure your drawing shows the *inside* of the cold pack and how the chemicals are stored initially.

7. Write instructions for a person using the cold pack you drew in step 6.