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

Chem R Pd. \_\_\_\_\_\_ Properties of Solutions

1. What is the freezing point of pure water?
2. What is freezing? (What 2 phases are present in the change and how does the particle behavior change?)
3. When you add salt to water (make a solution) and try to freeze it, will both the salt and the water go through the freezing process? Explain.
4. What happens to the temperature at which water freezes when there is salt in it? Is it still 0°C?
5. What is the relationship between the concentration of dissolved particles and the freezing point of a solution?
6. How does salting the roads PREVENT ice from forming?
7. Why don’t people in Canada and Alaska bother with salting the roads?
8. How does salting the roads cause MELTING of snow and ice?
9. What do you think “dissociates” means? “When it [NaCl] dissolves in water, it dissociates into its ions: Na+ and Cl-…”
10. Why are MgCl2 or CaCl2 better for salting the roads than NaCl?
11. What are two ways that technology has improved the way in which we salt roads?