

## Bill Nye – States of Matter

Name \_\_\_\_\_

1. What are the three phases of matter?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. What is required in order to change the phase of any type of matter?

3. What is the boiling point of liquid nitrogen? \_\_\_\_\_

4. What does liquid nitrogen do to the molecules of the three objects Bill “cooks?”

\_\_\_\_\_

5. What is pressure? \_\_\_\_\_

\_\_\_\_\_

6. What is absolute zero? \_\_\_\_\_

\_\_\_\_\_

7. Why can't we get any type of matter to absolute zero? \_\_\_\_\_

\_\_\_\_\_

8. What is the “fizz” in Coca Cola? \_\_\_\_\_

For the next three questions, you can use either words or a picture to answer:

9. Describe the speed & distance of molecules in a solid:

10. Describe the speed & distance of molecules in a liquid:

11. Describe the speed & distance of molecules in a gas:

12. How do they demonstrate that gases have mass?