

Name _____

EXCITED STATES

I Put an "M" beside each thing that is matter and "NM" beside things that are not.



- 1) Paperclip _____
- 2) Light from a Flashlight _____
- 3) Sugar _____
- 4) Chicken With Lips _____
- 5) Air _____

- 6) Pencil _____
- 7) Ear Wax _____
- 8) Heat from a Fire _____
- 9) Bolt of Lightning _____
- 10) Brilliant Idea _____



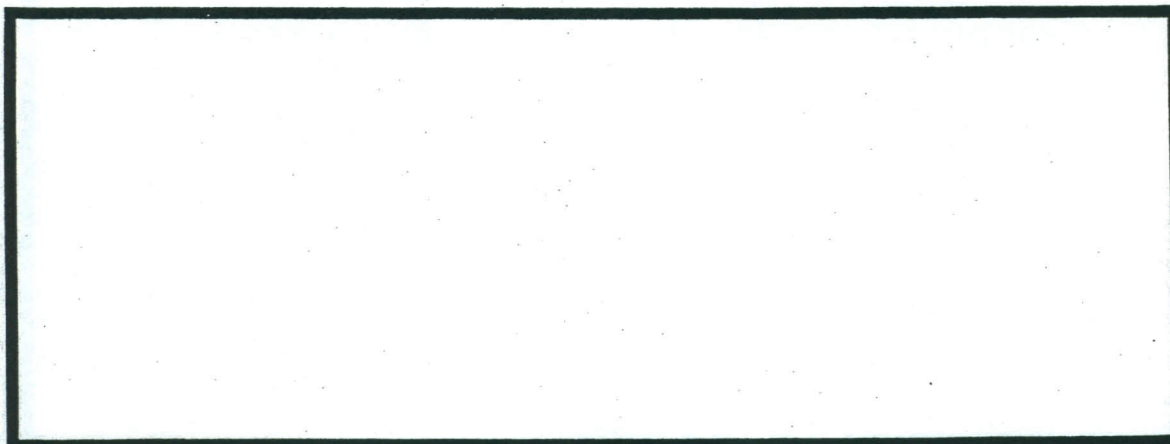
II True/False

- 1) A gas is the lowest energy state. (T/F) _____
- 2) Matter is something that takes up space and has mass. (T/F) _____
- 3) Particles in solids are closest together. (T/F) _____
- 4) Particles in liquids "slide" easily past each other. (T/F) _____
- 5) Vapour is another word for gas. (T/F) _____
- 6) A gas has very fast moving particles. (T/F) _____
- 7) In a rock, the particles would be vibrating back and forth. (T/F) _____
- 8) Clouds (water vapour) have particles that are close together. (T/F) _____
- 9) A frozen popsicle is in a low energy state. (T/F) _____
- 10) Particles in solid chocolate are further apart than particles in melted chocolate. (T/F) _____

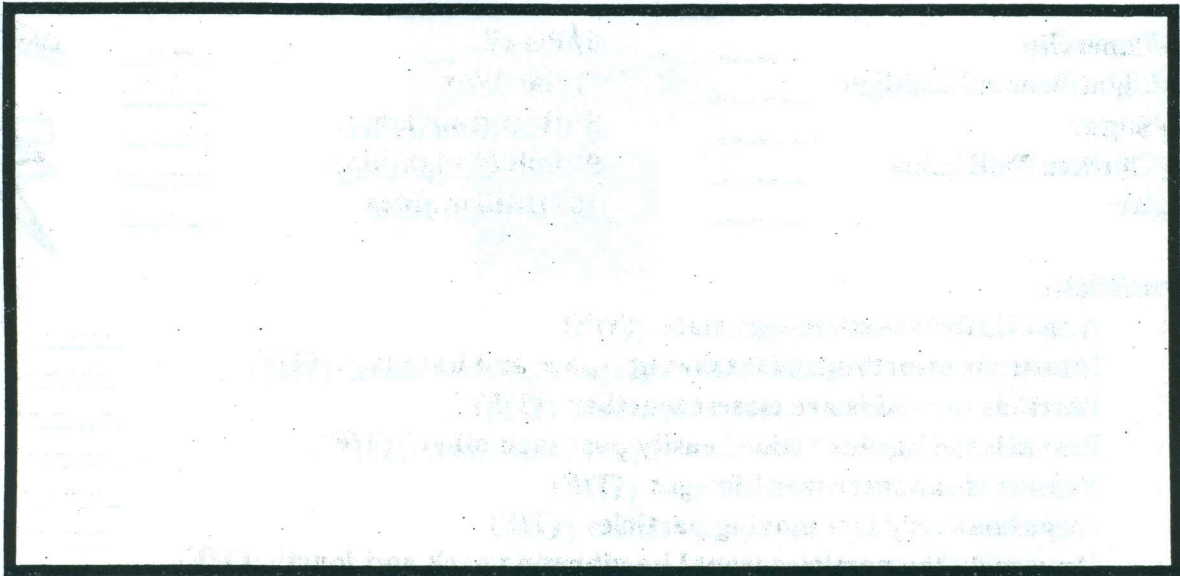
III SECOND GRADERS ON CHOCOLATE BARS AND POP

Understanding the three states of matter and differences between a solid, a liquid and a gas is easy. All you have to do is think about what a class of second graders class is like.

Solid State: Second graders at 9:30 in the morning are like particles in the solid state. They are low energy, arranged close together in nice neat rows and are maybe even vibrating just a little. Draw and color "solid" second graders.



Liquid State: Now, if you were to give each person in this quiet grade two class a chocolate bar things would begin to happen. The class would no longer be in the low energy solid state. Kids would start to perk up, talk more and move around with all this new energy. This class would now be in the "liquid state" with students starting to move freely around the classroom. Draw and color "liquid" second graders.



Gas State: If you now gave those same kids a can of pop in addition to the chocolate bar, stand back. The kids would not be sliding past each other calmly but would instead be flying around the room like chickens with their heads cut off! The second graders would now be in the high energy "gas state", slamming into each other and then being as far apart as the room would allow. The class would be a disaster area and the teacher would probably be seeking therapy. Draw and color "gas" second graders.

