Name _____hour ____

PRE-DENSITY LAB

/63

Several objects are placed around the room. It is your job as a scientist to collect information about these objects. A table has been created for you below so that you can organize your data. Don't forget to label your numbers.

1-40

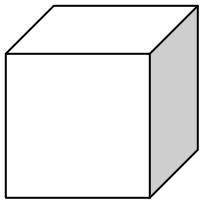
	Aluminum	Steel	Brass	Copper	Acrylic	Oak	Nylon	Pine	Poplar	pvc
Volume in cm3										
Mass in grams										

41. What did you notice about the volume of all these objects?

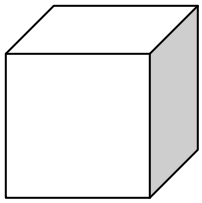
42. What did you notice about the mass of all these objects?

43. How can the copper block be the same volume as the poplar block yet have so much more mass? What could you tell me about the number of molecules inside the block? What could you say about the distance between the molecules in the block?

44. Draw a picture of the copper block's molecules and the poplar block's molecules.



Copper



Poplar

Please collect data for the following cylinders:

Sample cylinder	Color	Length (cm)	Mass (g)
1			
2			
3			
4			
5			

55- 59 Put the cylinder numbers in order from the LEAST volume to the GREATEST volume.

60. What did you notice about the volume of all these objects?

61. What did you notice about the mass of all these objects?

62. Would you say the molecules in cylinder 1 are tightly packed or not tightly packed?

63. Would you say the molecules in cylinder 4 are tightly packed or not tightly packed?