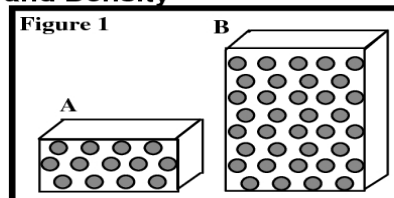


Name _____

Date _____ Pd _____

Chemistry – Unit 1 Worksheet 3 Mass, Volume, and Density

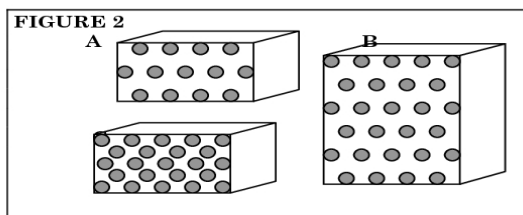
1. Study the matter shown in Figure 1. Each dot represents a particle of matter. [Assume the particles are uniformly distributed throughout each object, and particles of the same size have the same mass.]



- a. In the table below, show how the masses, volumes, and densities of A and B compare by adding the symbol $<$, $>$, or $=$ to the statement in the second column.
- b. Explain your reasoning for each answer in the last column.

| Property | Relationship | Reasoning |
|----------|--------------|-----------|
| Mass | A ____ B | |
| Volume | A ____ B | |
| Density | A ____ B | |

2. Study the matter in Figure 2. [Assume the particles are uniformly distributed throughout each object, and particles of the same size have the same mass.]



- a. In the table below show how the masses, volumes, and densities compare by adding the symbol $<$, $>$, or $=$ to the statement in the second column.
- b. Explain your reasoning for each

| Property | Relationship | Reasoning |
|----------|--------------|-----------|
| Mass | A ____ B | |
| | A ____ C | |
| Volume | A ____ B | |
| | A ____ C | |
| Density | A ____ B | |
| | A ____ C | |