

3. Substance: Carbon dioxide

Phase: Solid

Volume 100 cm<sup>3</sup>  
Mass 156 g

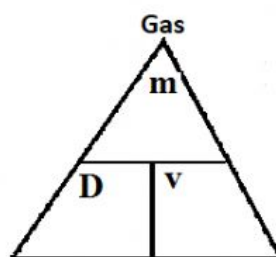
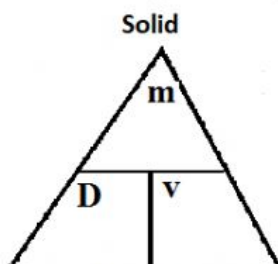
Density \_\_\_\_\_ g/cm<sup>3</sup>  
answer  
2 decimals

Phase: Gas

Volume 100 cm<sup>3</sup>  
Mass 0.198 g  
4 decimals

Density \_\_\_\_\_ g/cm<sup>3</sup>  
answer  
5 decimals

Name of phase change from solid to gas \_\_\_\_\_



Which is more dense, the solid or gas? **solid gas**

How does the arrangement of the particles in a solid and a gas explain your answer?

The particles in a **solid gas** are packed more closely together this **increases decreases** density.

4. Substance: Mercury

Phase: Solid

Volume 10 cm<sup>3</sup>  
Mass 136.5 g

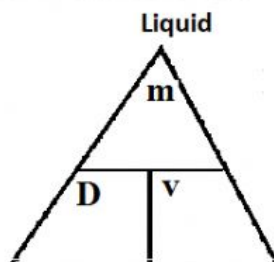
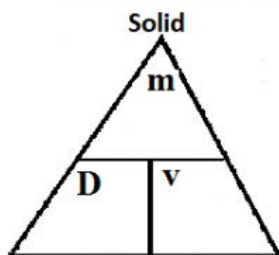
Density \_\_\_\_\_ g/cm<sup>3</sup>  
answer  
2 decimals

Phase: Liquid

Volume 10 cm<sup>3</sup>  
Mass 135.9 g

Density \_\_\_\_\_ g/cm<sup>3</sup>  
answer  
2 decimals

Name of phase change from liquid to solid \_\_\_\_\_



Which is more dense, the solid or liquid? **solid liquid**

How does the arrangement of the particles in a solid and a liquid explain your answer?

The particles in a **solid liquid** are packed more closely together this **increases decreases** density.

5. Substance: Pentane

Phase: Liquid

Volume 3800 cm<sup>3</sup>  
Mass 2370 g

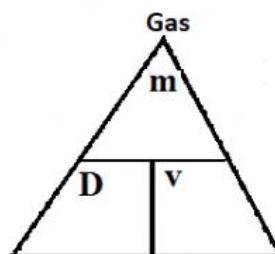
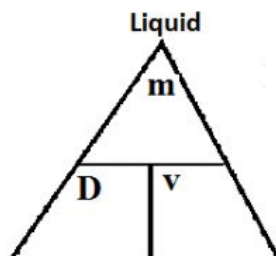
Density \_\_\_\_\_ g/cm<sup>3</sup>  
answer  
2 decimals

Phase: Gas

Volume 3800 cm<sup>3</sup>  
Mass 10.7 g

Density \_\_\_\_\_ g/cm<sup>3</sup>  
answer  
4 decimals

Name of phase change from gas to liquid \_\_\_\_\_



Which is more dense, the liquid or gas? **liquid gas**

How does the arrangement of the particles in a liquid and a gas explain your answer?

The particles in a **liquid gas** are packed more closely together this **increases decreases** density.