3. *Substance:* Carbon dioxide

Phase: Solid

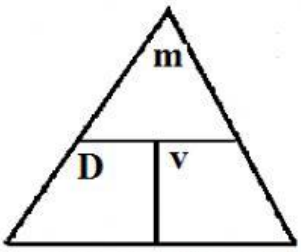
Volume	Mass	Density
100 cm^3	156 g	_____ answer (2 decimals) g/cm^3

Phase: Gas

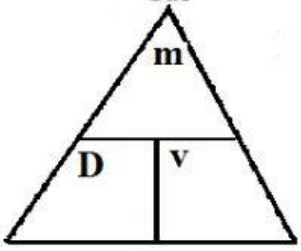
Volume	Mass	Density
100 cm^3	0.198 g (4 decimals)	_____ answer (5 decimals) g/cm^3

Name of phase change from solid to gas _____

Solid



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

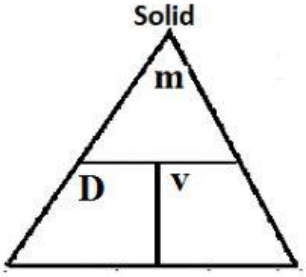
Volume	Mass	Density
10 cm^3	136.5 g	_____ answer (2 decimals) g/cm^3

Phase: Liquid

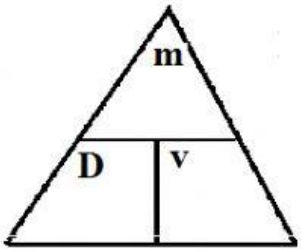
Volume	Mass	Density
10 cm^3	135.9 g	_____ answer (2 decimals) g/cm^3

Name of phase change from liquid to solid _____

Solid



Liquid



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

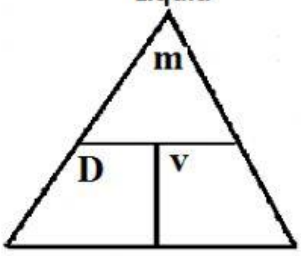
Volume	Mass	Density
3800 cm^3	2370 g	_____ answer (2 decimals) g/cm^3

Phase: Gas

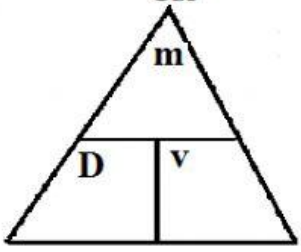
Volume	Mass	Density
3800 cm^3	10.7 g	_____ answer (4 decimals) g/cm^3

Name of phase change from gas to liquid _____

Liquid



Gas



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.

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