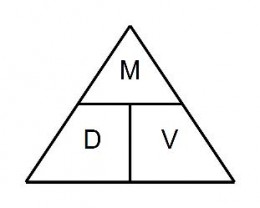
SNC1P/L Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



Density Quiz

1. Match the following words with their definitions. (4 marks)

\_\_\_\_\_ mass a. the amount of space an object takes up

\_\_\_\_\_ volume b. the used to measure the volume of a liquid

\_\_\_\_\_ graduated cylinder c. the amount of mass in a space

\_\_\_\_\_ density d. how heavy an object is

1. Circle the correct answers to the the question. (2 marks)
2. Corn syrup **sinks** in water. Based on this observation, it can be concluded that:

|  |  |
| --- | --- |
| a | the density of corn syrup is less than water. |
| b | the density of corn syrup is greater than water. |
| c | the density of corn syrup is equal to that of water. |
| d | Corn syrup is lighter than water |

ii) The density of **mercury is 13 600 kg/m3**, the density of iron is 7 900 kg/m3, the density of *uranium is 18700 kg/m3*. If these substances were melted and made into a liquid tower, then what order would they be in from the bottom of the container to the top?:

|  |  |  |  |
| --- | --- | --- | --- |
| a) | mercury, iron, uranium |  |  |
| b) | iron, mercury, uranium |  |  |
| c) | uranium, iron, mercury |
| d) | uranium, mercury, iron |

iii) Calculate the densities of the 3 materials:

|  |  |  |  |
| --- | --- | --- | --- |
| **Materials** | **Mass (kg)** | **Volume (m3)** | **Density (kg/m3)** |
| A | 30.8 | 27.5 |  |
| B | 35.2 | 27.5 |  |
| C | 30.8 | 24.0 |  |

Which are made of the same substance?

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| a) | A and B |  | b | A and C | c) | B and C | d | A, B, C | e) | none of them |
|  |  |  |  |  |  |  |  |  |  |  |

1. A block has a mass of 935 g. It was placed in a graduated cylinder containing 10 mL of water, the water level rose to 100 mL. What is the density of this substance? Use the GRASS method. (5 marks)