

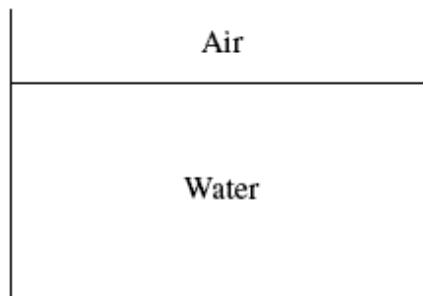
Name: \_\_\_\_\_ Section: \_\_\_\_\_  
Matter: Atoms and Properties – Open Response Question 1

Two different bars of soap are being investigated by a group of students. They measured the mass and volume of each bar and recorded the results in the table below.

Soap	Mass (g)	Volume (cm <sup>3</sup> )
A	110	100
B	95	100

**Density of water = 1.0 g/cm<sup>3</sup>**

- a) Calculate the density of each bar of soap. Show your work.
- b) The diagram below represents a container of water. Draw and label the positions that soap bar A and soap bar B would occupy if they were placed in this container.



- c) Explain why you drew each bar of soap in the position selected.