**VOLUME, DENSITY – WORKSHEET**

Find the volume

1. What is the volume of a box measuring 2cmX7cmX3cm?
2. What is the volume of a box measuring 3cmX6cmX4cm?

*Icm3 is equal to 1mL or another way to put it is 1L = 1,000cm3. Convert your answers as required*.

1. What is the volume in ml of a box measuring 2cmX3cmX4cm?
2. What is the volume in ml of a cube measuring 5cm on each side?
3. What is the volume in L of a box measuring 5cmX20cmX5cm?
4. What is the volume in L of a cube measuring 10cm on each side?

*For the next problems you’ll need to figure density. Remember that density is mass/volume*.

1. An iron cube measures 10cmX10cmX10cm. What is its volume?
2. If the same iron cube weighs 7.9kg, what is its density in g/cm3?
3. What is the density of a cube of water measuring 2cmX4cmX1cm, with a mass of 8g?

*Water has a density of approximately 1g/cm3. In fact icm3 of water used to be the standard for a gram. Objects will sink if their density is greater that water and will float if their density is less. For the following problems, decide if the block will sink or float.*

1. A cube measuring 2cm on each side weights 5g, will it sink or float?
2. A block has a mass of 20g and measures 2cmX4cmX2cm, will it sink or float?
3. A hollow iron cube has measures 5cm on each side and has a mass of 20g. Will the iron cube sink or float?
4. A cube made of very old hard wood, has a mass of 45g and measures 6cm a side, will it sink or float?