DENSITY HOMEWORK
Use your class notes from spiral page _____ to help you.

$volume = length \times width \times height$ Label cm^3

$density = \frac{m}{v}$ Label g/cm^3

1. An iron cube measures 10cm X 10cm X 10cm. What is its **volume**?

2. If the same iron cube's mass is 7.9kg, what is its **density** in g/cm^3?

3. What is the **density** of a block of chocolate measuring 2cm X 4cm X 1cm, with a mass of 8g?

4. What is the **density** of a block of wood measuring 0.9cm X 2cm X 6cm with a mass of 5.4g?

5. What has the **greater density**, a cube of water measuring 1cm X 1cm X 1cm and having a mass of 1g, or a block of plastic measuring 2cm X 3cm X 1cm with a mass of 4g?

6. What is the density of a **cube** of paper measuring 3cm on each side and its mass is 4?

Water has a density of approximately 1g/cm^3. In fact 1cm^3 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.**

7. A **cube** measuring 2cm on each side and its mass is 5g; will it sink or float?

8. A block has a mass of 20g and measures 2cm X 4cm X 2cm; will it sink or float?

9. A hollow iron **cube** has measures 5cm on each side and has a mass of 20g. Will the iron cube sink or float?

10. A **cube** made of very old hard wood, has a mass of 45g and measures 6cm a side, will it sink or float?