Problem: Determine the density of water, and identify 4 metals based on their density.

Procedure:

WATER:

1. Find the mass of a clean, dry beaker with the digital balance (to the nearest cg or 0.01 g).
2. Fill the buret up to 0.00 (not past) with DISTILLED WATER and record the initial volume (nearest 0.01 mL).
3. Add up to 50 mL (not more) water from the buret into the empty beaker and record the final volume.
4. Find the mass of the beaker with water.

METALS:

5. Measure the mass of each metal cylinder with the digital balance (to the nearest cg or 0.01 g).
6. Find the diameter and height of each cylinder with the vernier caliper.
7. For one metal cylinder (since they are all similar) find the volume by water displacement (nearest mL). Take a PLASTIC graduated cylinder with enough water to submerge the metal. Read the initial water volume, add the metal and read the final water volume to find the metal's volume.
8. For the rectangular prism metal object, find the mass and dimensions (l,w,h) using the caliper.

Data:

Mass clean dry beaker _____ g
Buret initial volume _____ mL
Buret final volume _____ mL
Mass beaker + water _____ g

METAL

Metal	#1	#2	#3	#4	prism
Color					
Mass (g)					
Diameter (mm)					L= ___mm W= __ mm
Height (mm)					

Water displacement:
Initial volume ____ mL
Final volume ____ mL