Intermediate Science 8
Fluids
Study Guide for Test 2

Know the following terms:

Buoyancy	Force	Balanced Force	Unbalanced Force
Average Density	Pressure	Atmospheric Pressure	hydraulic system

pneumatic system.

Know the following:

1) Describe the movement of objects in terms of balanced and unbalanced forces.

2) Distinguish between Mass and weight

3) Describe the connection between weight, buoyancy, and sinking or floating.

4) Identify objects that will sink and float (an object will float if it is less dense than the fluid in which it is immersed, vice versa)

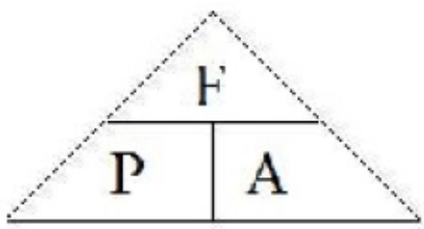
5) Provide examples of technologies that have been developed because of our understanding of density and buoyancy.

   i) personal flotation devices (ex. life jackets)
   ii) submarines
   iii) hot air balloons

6) Define pressure

7) Define the Pascal (Pa) unit

8) Calculate the force, given pressure and area



9) Calculate the area, given pressure and force

10) Calculate the pressure, given force and area

11) State Pascal's law

12) Identify examples of applications of Pascal's law. Include:

   (i) a car lift or hoist
   (ii) an hydraulic jack
   (iii) automobile braking system