

Chapter 4 Test Study Guide: Pressure

- Know what a fluid is and how fluids behave when transferred to other containers.
- Know what Atmospheric Pressure is and how it changes as you climb a mountain.
- Make sure you know the units for pressure and density.
- Know which directions pressure acts on an object submersed in water.
- Know and be able to explain what density is and how fluids form layers based on their densities.
- Know and be able to explain how pressure changes when you go from the top of a mountain to the bottom of the ocean.
- Given the formulas, be able to calculate density and pressure.

Chapter 4 Test Study Guide: Buoyancy

- Know that buoyancy acts on objects that are in **fluids**.
- Know what buoyancy is.
- Know that buoyancy depends on the objects **volume** NOT depth.
- Know when objects will and will not float.
- Know and understand Archimedes' Principle
- Know that the buoyant force is equal to the difference between upward and downward pressure.
- Understand/Know that buoyancy does NOT change with depth.
- Be able to explain how/where buoyant and gravitational forces act on a floating balloon.
- Be able to explain how the buoyant force on a diver is the result of the pressure that acts on/around the diver.
- Make sure you understood the balloon, tennis ball, and pool ball demonstration.
 - (What did the spilling/overflowing of water mean, what force was pushing upward on the objects, which object had the most buoyancy acting on it, what principle did it demonstrate?)