

## THE PRESSURE OF FLUIDS

Complete this concept review handout and keep it as a record of what you have learned.

## PRESSURE AND INCOMPRESSIBLE FLUIDS

The pressure exerted by an incompressible fluid on an object depends on \_\_\_\_\_

temperature and volume

Examples of measuring instruments: \_\_\_\_\_

## PRESSURE AND COMPRESSIBLE FLUIDS

The pressure in a compressible fluid depends on Temperature

volume ; # of particles

Examples of measuring instruments: \_\_\_\_\_

The effects of variations in volume on the pressure of a compressible fluid

Variation in volume	Result
If volume increases	pressure decreases
if volume decrease	pressure increases

The effect of a change in pressure on the volume of a compressible fluid

Change in pressure	Result
If pressure increases	volume decreases
if pressure decreases	volume increases

## PRINCIPLES RELATED TO VARIATIONS IN THE PRESSURE OF FLUIDS

- **First principle:** A fluid naturally moves from a zone of high pressure toward a zone of low pressure
- **Second principle:** Pressure applied to the surface of a fluid inside a closed container gets uniformly distributed to every part of the fluid
- **Third principle:** A transfer of pressure in a fluid can increase the force involved.

not needed →

not needed