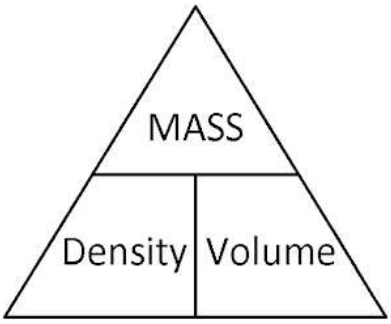
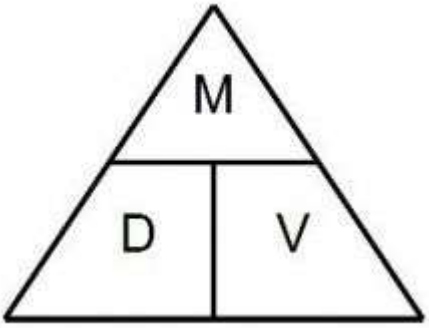
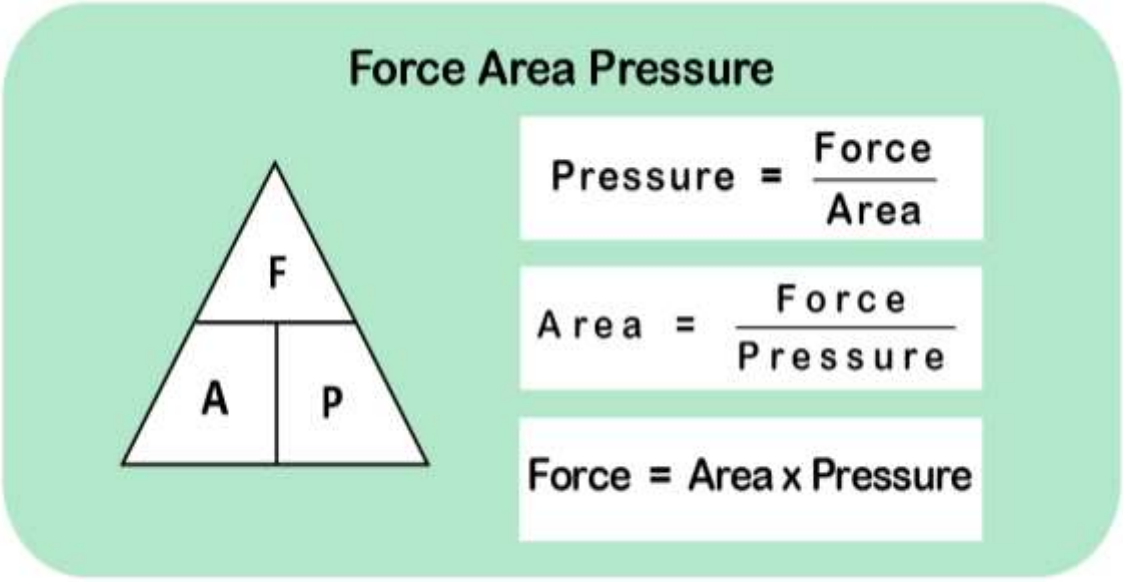
DENSITY





1. Density is a measure of how light or heavy a material is.
2. Density is the mass of $1cm^3$ of a material.
3. Density of water $=1.0g/\ cm^3$
4. To determine the density of a material,we measure mass and volume.
5. Density = mass/volume
6. Mass=density X volume
7. Volume = mass/density
8. Unit of measuring density $=g/\ cm^3$



1. Pressure is caused when a force acts on an area.
2. A big force acting on a small area creates a high pressure.
3. Unit of measuring pressure =pascal(pa)
4. Pascal or pa is same as N/m^2
5. Liquids and gases can cause pressure.
6. The pressure of a gas or liquid is caused by its weight pressing downwards.

7. The particles of a gas or a liquid collide with the walls of its container, this causes pressure.

The principle of moments

1. A force has a turning effect when it causes an object to turn about a pivot.
2. The moment of a force =force X distance from pivot.
3. The principle of moments states that, for a beam to be balanced,
   The clockwise moment = anticlockwise moment
4. Moment of force= f X d=f X d
5. The **anticlockwise moment** acts downward on the left, and the **clockwise moment** acts downwards on the right.