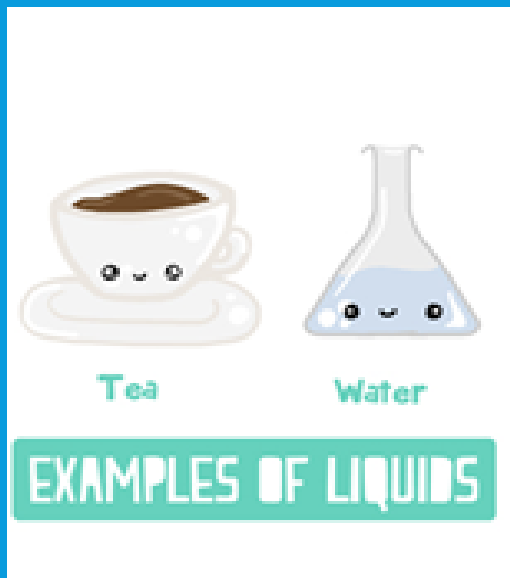


# FLUIDS

- A fluid is any substance that has flow or spread. If it is poured into a container, it will take the shape of the container.



Sand and gravel are not fluids.

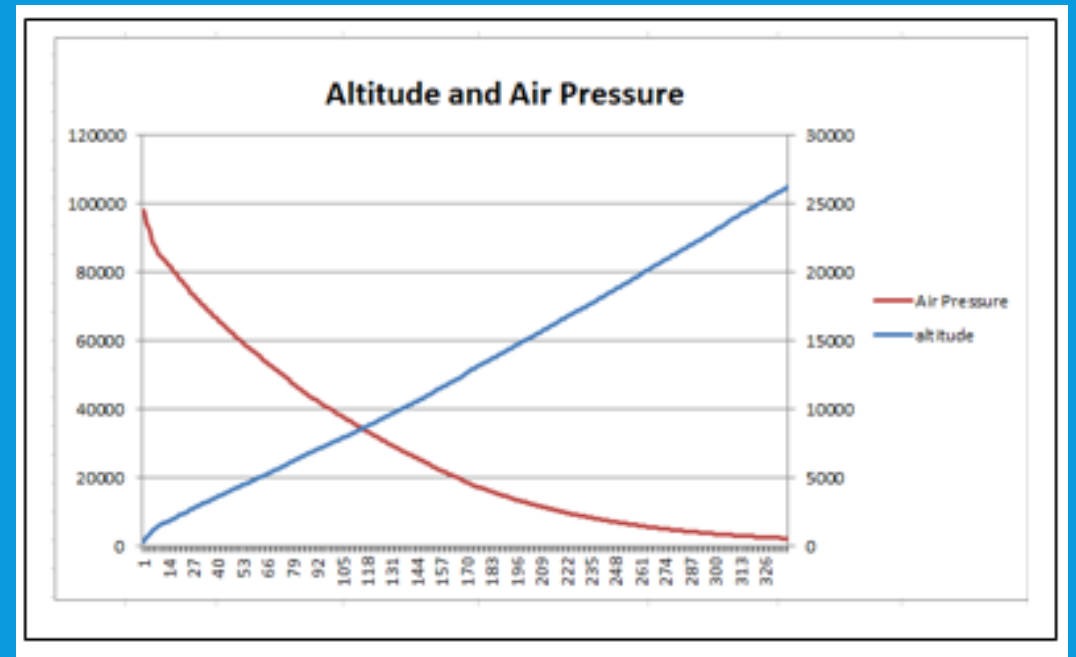
# FLUIDS FALL INTO 2 CATEGORIES

- In a compressible fluid, the volume can change. Gases are compressible fluids.
- In an incompressible fluid, the volume does not change. Liquids are incompressible fluids.

# PRESSURE

- The continuous physical force exerted on or against an object by something in contact with it.
- The change in pressure is exerted on a compressible fluid, the volume will.....

If the pressure increases	the volume decreases
If the pressure decreases	the volume increases



WAVES

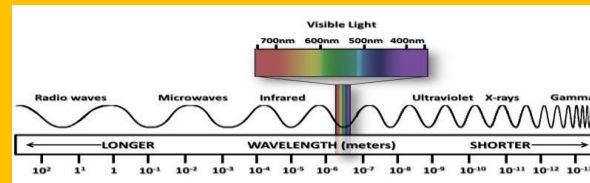
# A WAVE IS A DISTURBANCE THAT TRAVELS THROUGH A MEDIUM. A WAVE TRANSPORTS ENERGY; IT DOES NOT TRANSPORT MATTER

- TYPES OF WAVES:

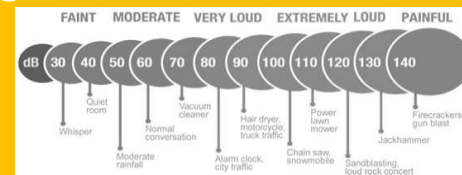
## MECHANICAL WAVES



## ELECTROMAGNETIC WAVES



## SOUND WAVES



# MECHANICAL WAVE

- A wave that requires a medium to travel through.
- Seismic waves, sound waves, water waves

# ELECTROMAGNETIC WAVE

- A wave that can travel through a medium and a vacuum.
- Ex: radio waves, light waves, uv rays, x-rays, infrared rays, gamma rays

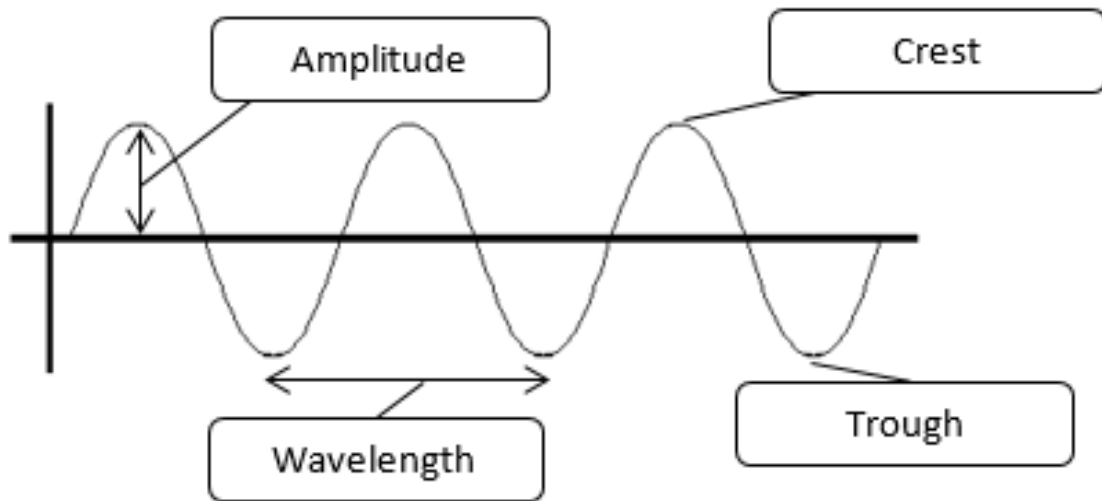
# SOUND WAVE

- A wave that is produced through vibrations and is a mechanical wave.

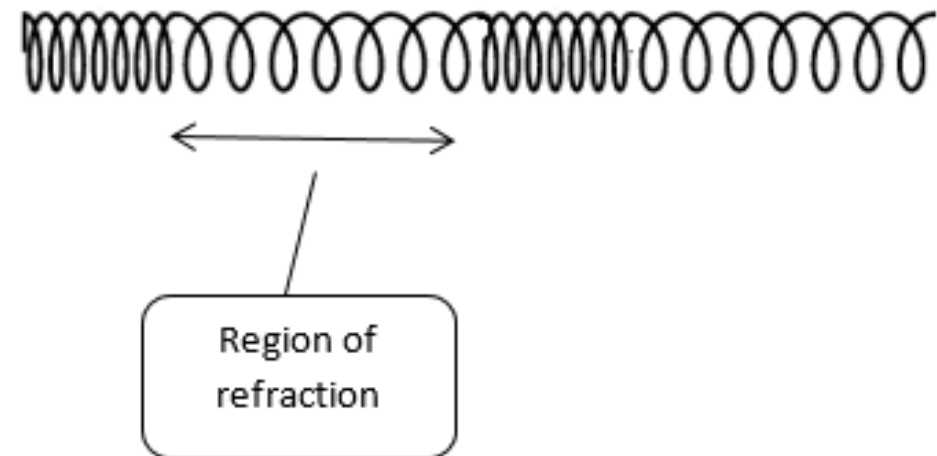


# HOW WAVES PROPAGATE

Transverse Waves

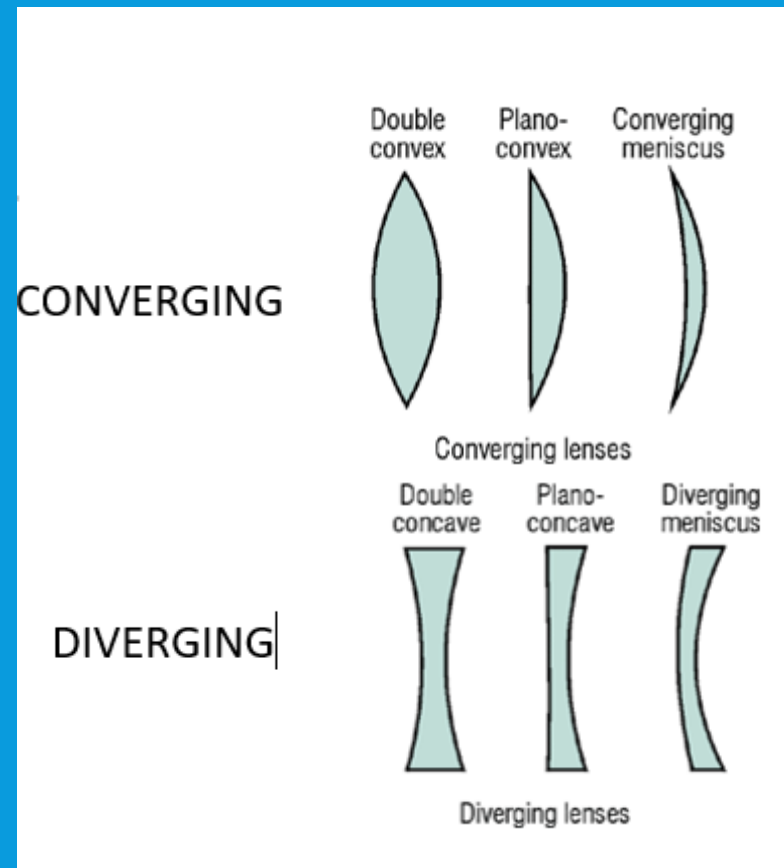


Longitudinal Waves

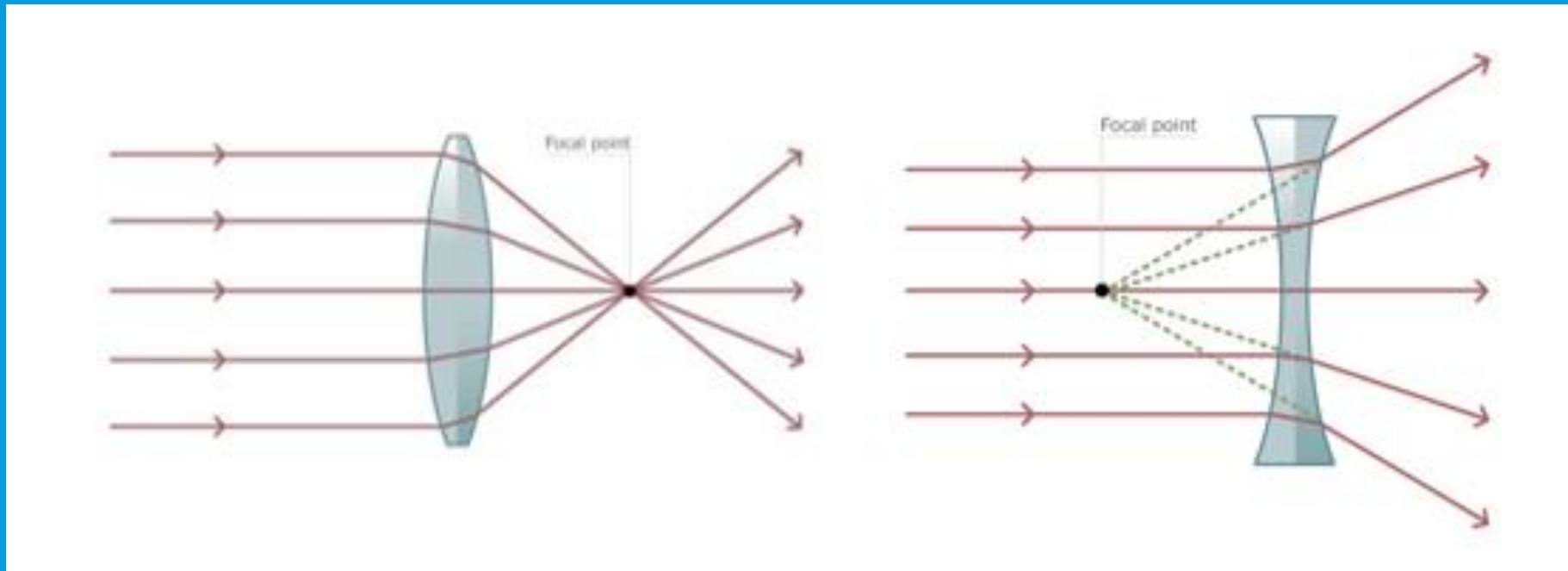


# LENSES

- 2 TYPES:

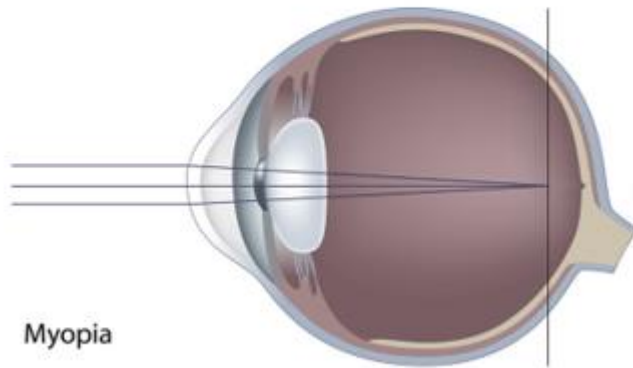


# LENSES ARE USED TO REFRACT LIGHT AND CREATE A FOCAL POINT



# MYOPIA

## ***MYOPIA (NEARSIGHTEDNESS)***



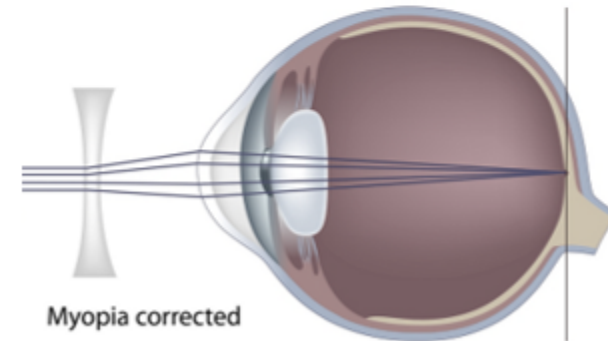
## **CONDITIONS OF THE EYE**

Focal point is formed in front of retina

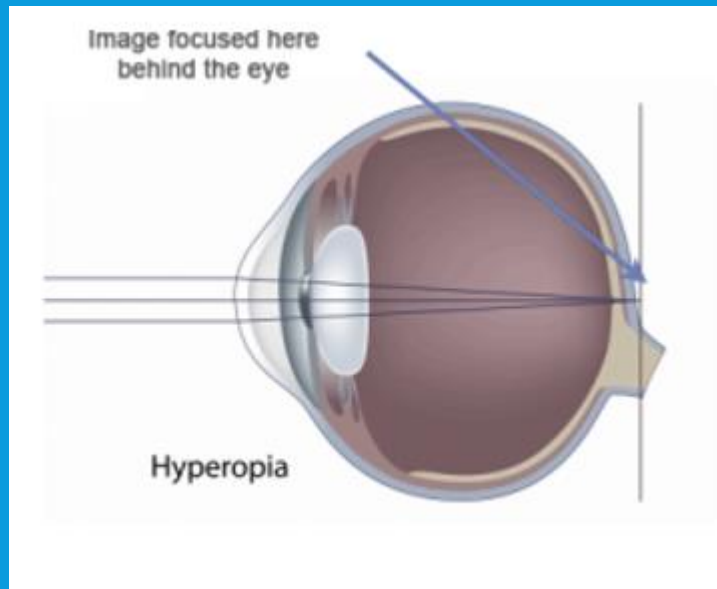
Cannot see objects at a distance.

**CORRECTION:**

Use a divergent lens to move the focal point back to the retina.



# *HYPEROPIA (FARSIGHTEDNESS)*



**Focal point is too far from the retina.**

**Cannot see objects close up.**

**CORRECTION:**

**Use a  
converging  
lens to move  
the focal point  
forward to the  
retina.**

