

Light Vocabulary Mini Lecture

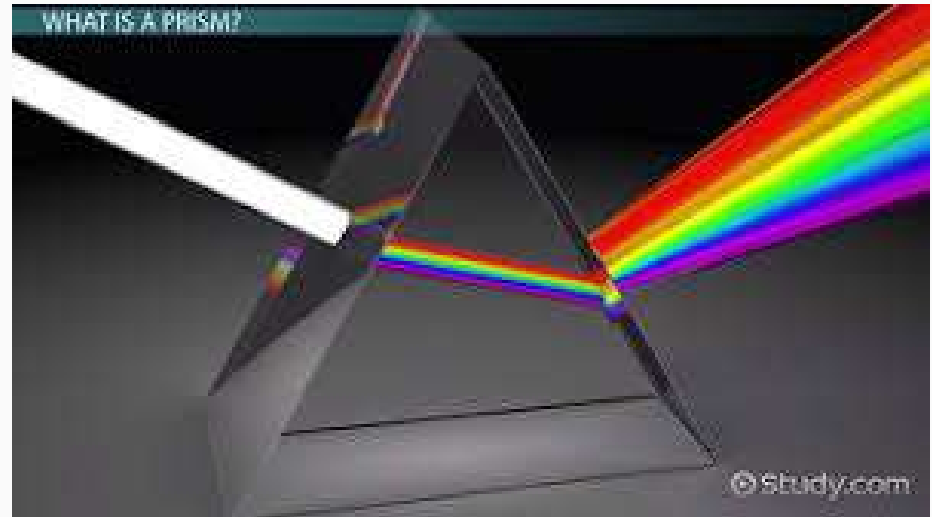
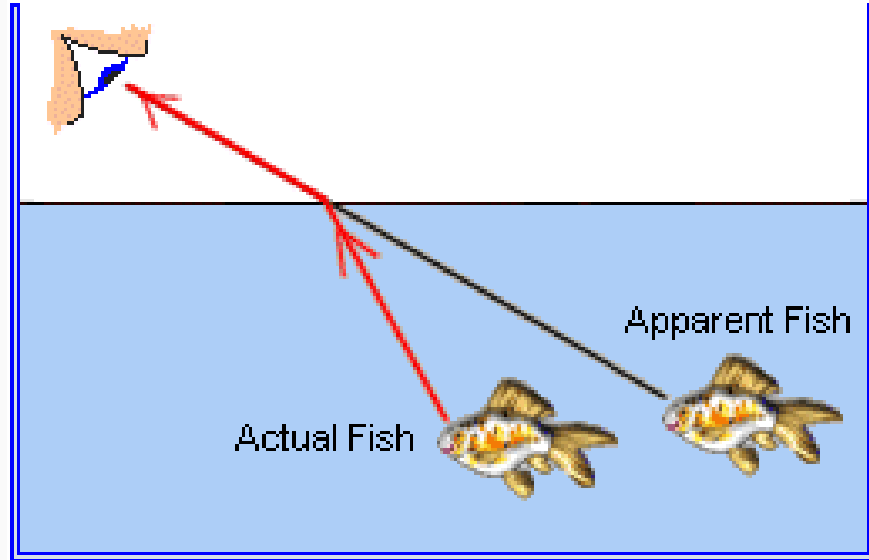
What can light do?

Reflection light bounces off a surface depending on the angle. Think throwing a basketball at a wall

Refraction change in direction when light goes from one material to another (ex. Air to water)



Refraction



Object Transparency

Transparent describes material that allow all of the light to pass through

Translucent some light goes through

Opaque no light passes through

Objects- What type of transparency?

Frosted Window

Mirror

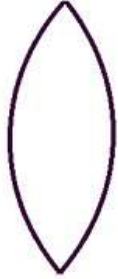
Window

Book

Water

Lenses Shape

Convex



Convex lens lens
is thicker in the
middle, curves out

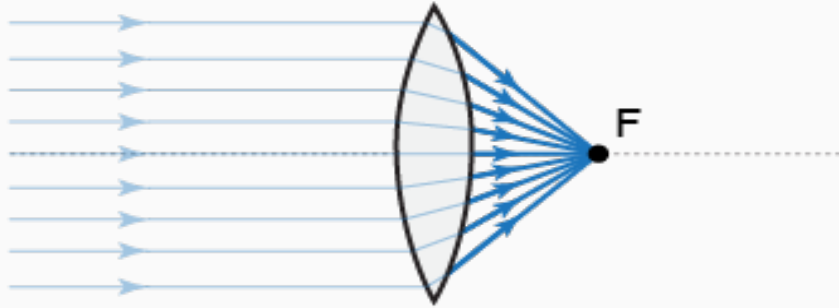
Concave



Concave lens thin
in the middle,
curves in

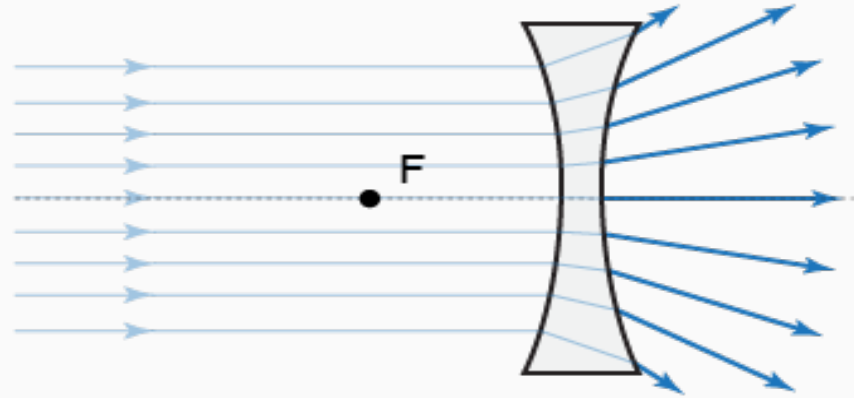
Converging vs. Diverging Lenses

Converging lens



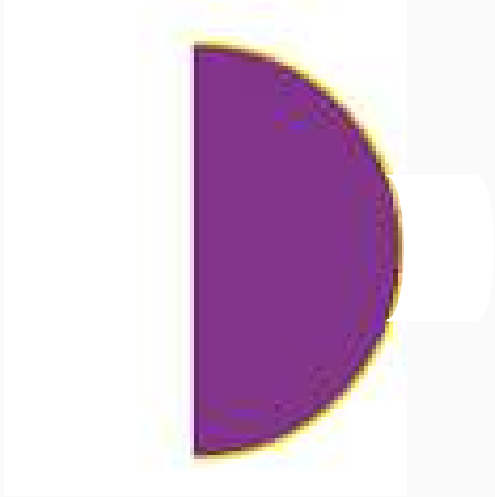
Incident rays parallel to the optical axis
converge toward the far focal point.

Diverging lens



Incident rays parallel to the optical axis
diverge away from the near focal point.

Mirror Shape

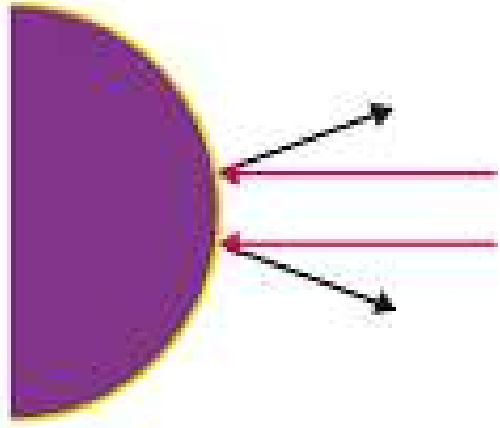


Convex mirror lens
is thicker in the
middle, curves out



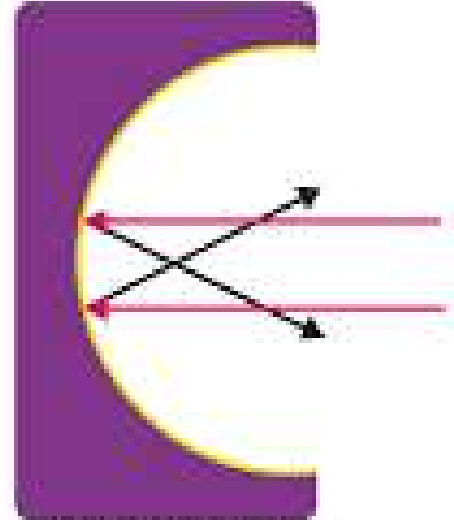
Concave mirror
thin in the middle,
curves in

Diverging vs. Converging Mirrors



CONVEX MIRROR

Light rays reflect outwards



CONCAVE MIRROR

Light rays reflect inwards