



Light

Light travels in straight lines

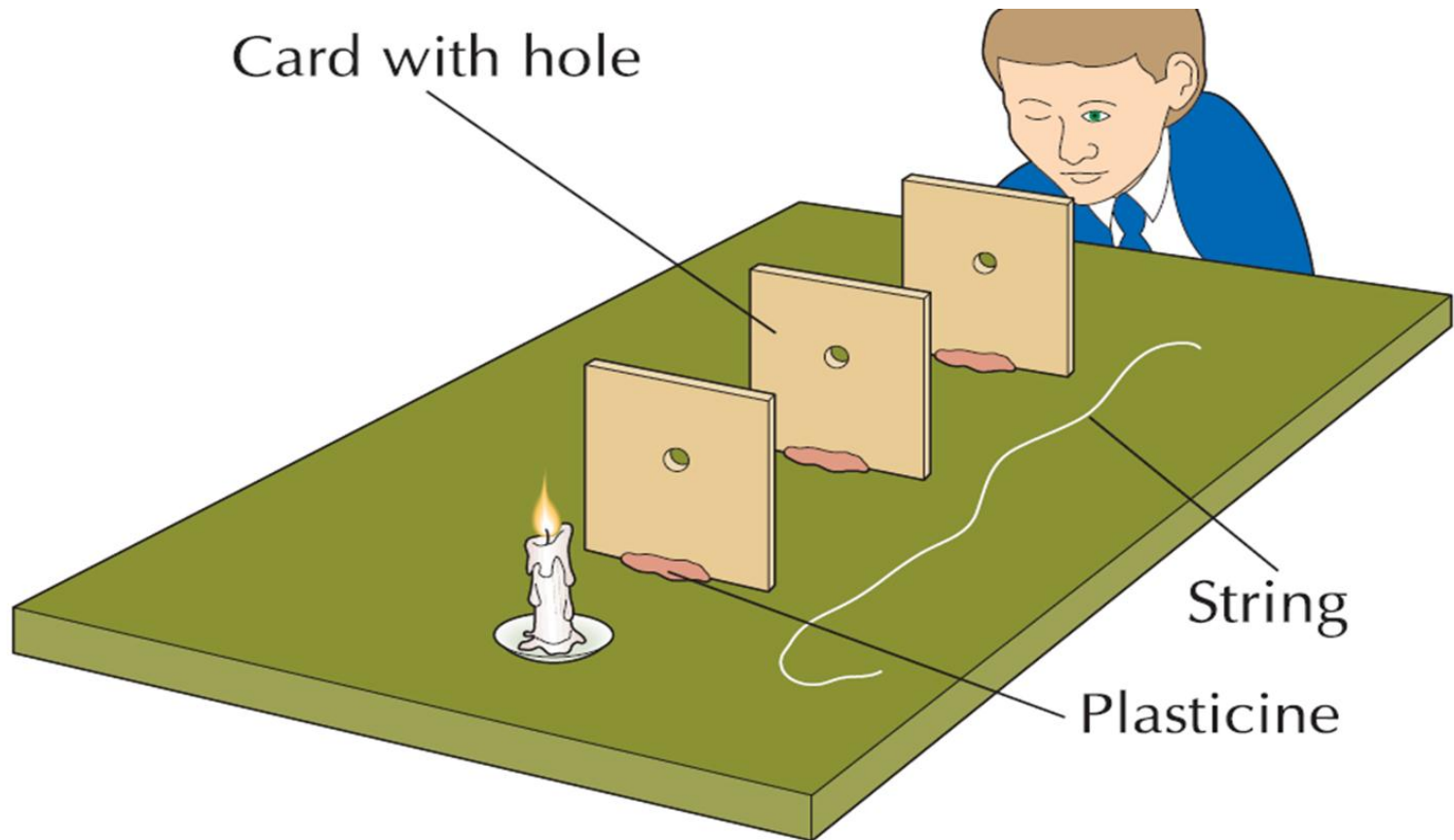


Shadows show that light travels in straight lines



Rooster

Experiment to show that light travels in straight lines



Luminous and Non-Luminous Objects

- A luminous object creates its own light,
The sun is luminous, as is a burning candle
or a light bulb.
- A non-luminous body does not create its
own light; it only reflects light.
The moon is a non-luminous body, as are
the walls of your classroom.

Dispersion

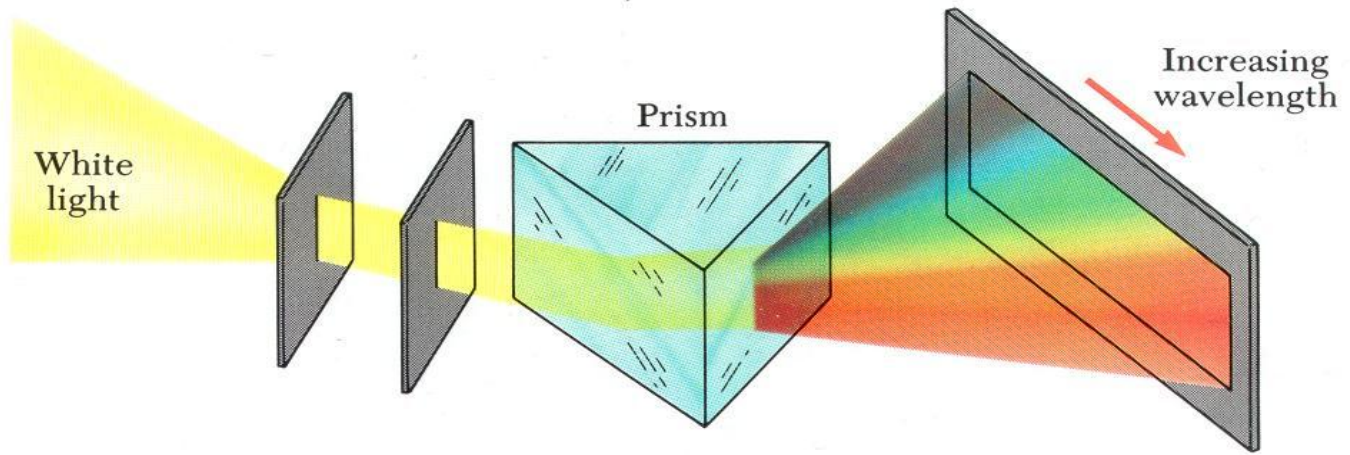
- Ordinary white light is made up of a mixture of coloured light.
- When white light passes through a prism it breaks up into its seven different colours.
- This is called Dispersion

Spectrum of Light

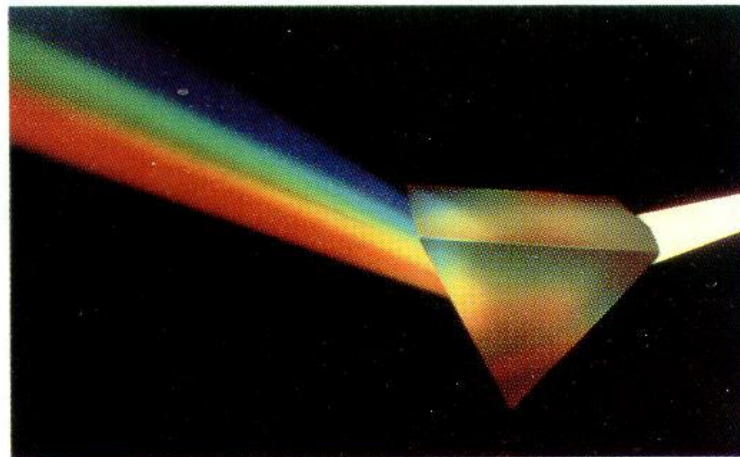
- The spectrum of light is made up of seven major colours:

RED, ORANGE, YELLOW, GREEN, BLUE,
INDIGO, VIOLET

- “Richard of York gave battle in vain”



(a)



(b)



Reflection of light

- If light falls on a smooth surface, it bounces back in an orderly way.
- You get a perfect image

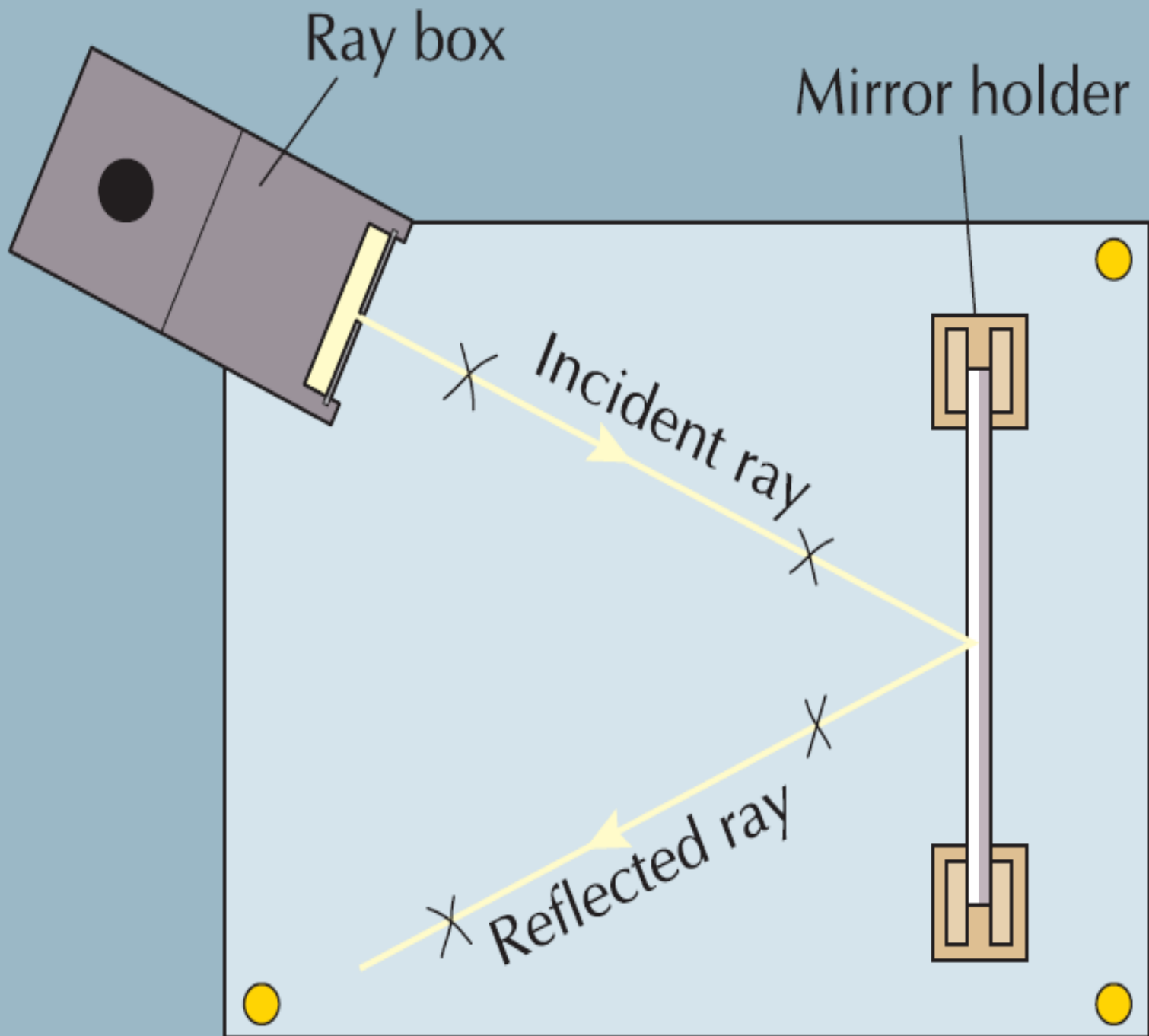


Reflection



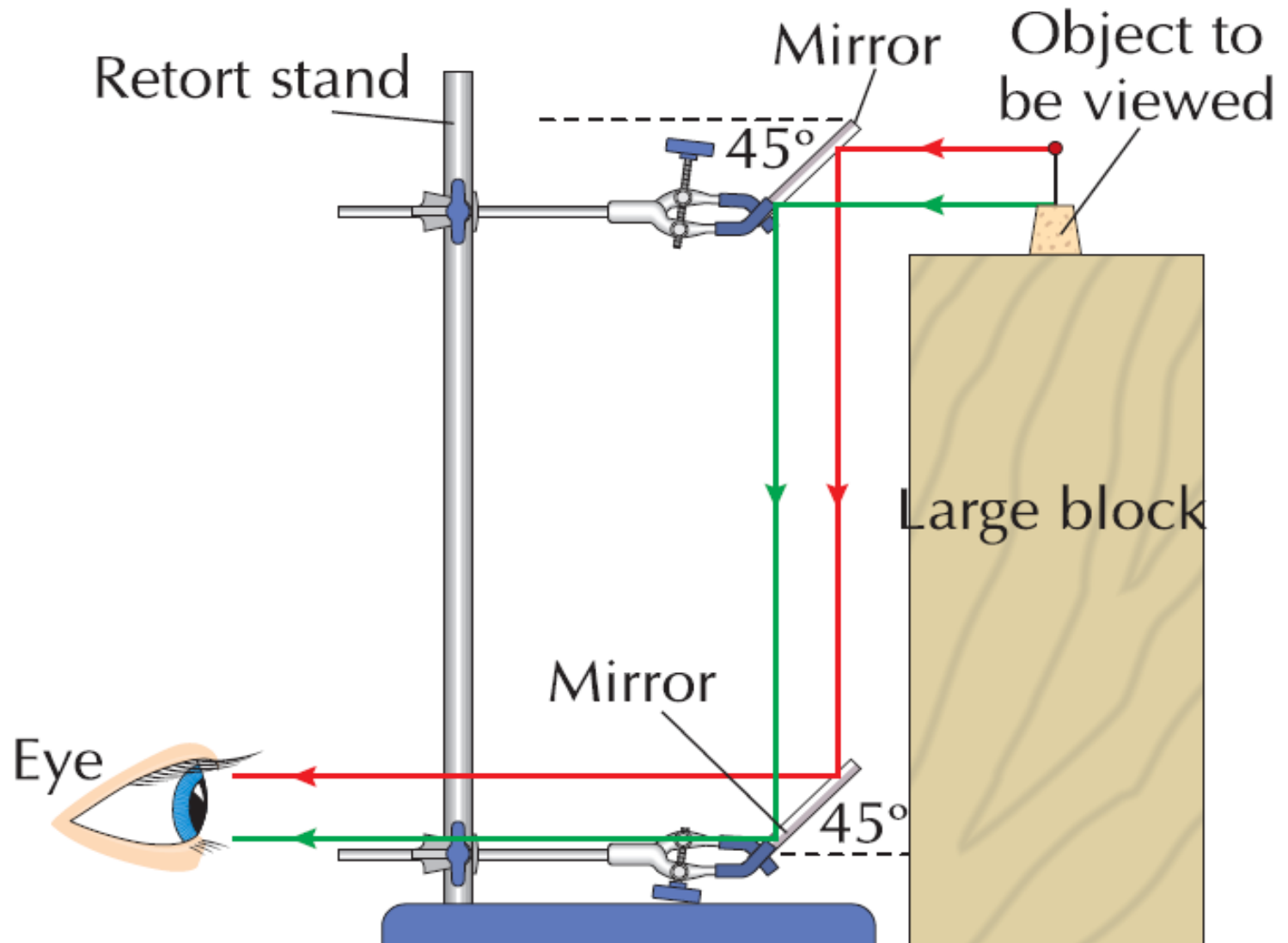
Plane Mirror

- A plane mirror is a flat mirror
- A beam of light from a ray box will reflect and bounce back from a plane mirror



A Periscope

- A periscope is made of 2 plane mirrors at 45 degree angles to each other
- A Periscope is used in a submarine and also to look around corners



Writing and reflection



Science

Card on wall



Science

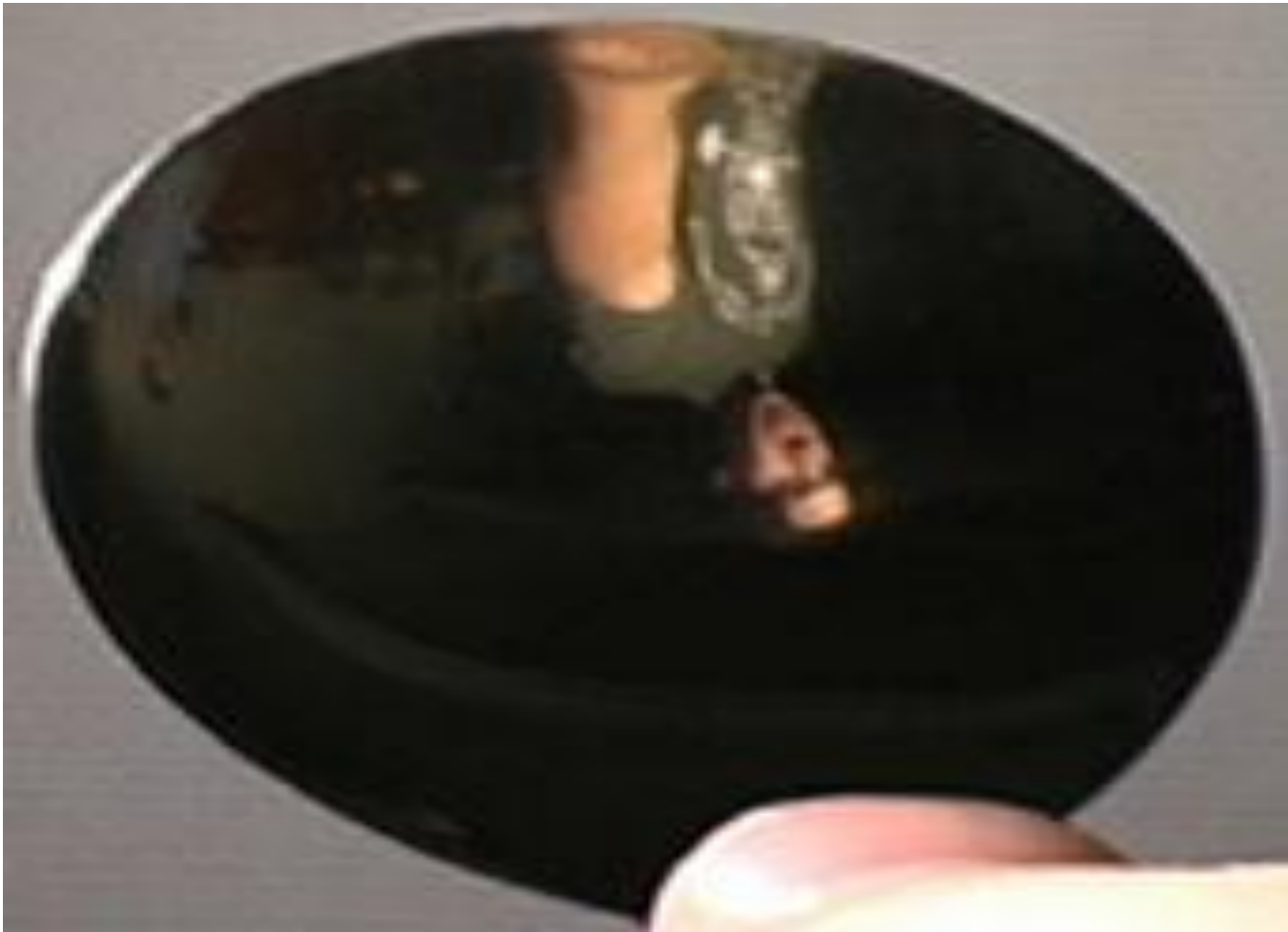
Image A

Science

Image B



Concave Mirror

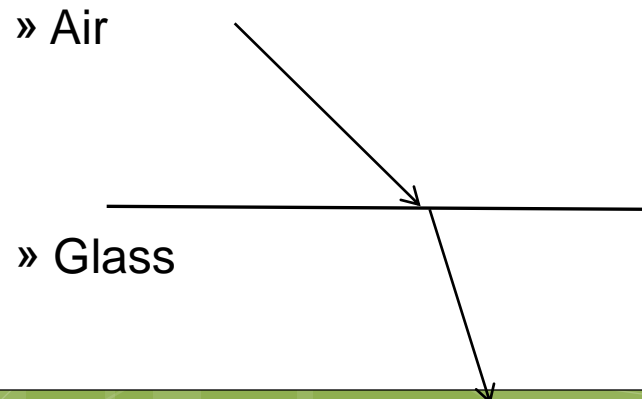


Convex Mirror



Refraction of light

- Refraction of light is the bending of light as it passes from one transparent material to another.
- When light enters or leaves either water or glass, for instance, the light beam is bent.





Convex Lens



Concave Lens

