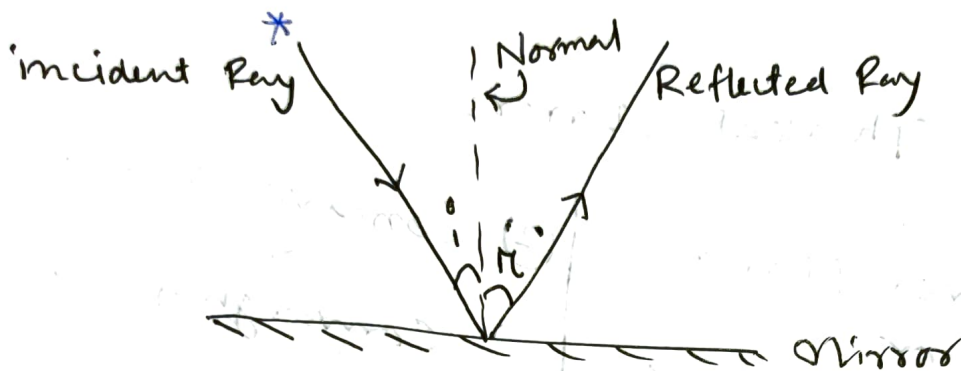


## Reflection of light

When light falls on a reflecting surface, it bounces back into the same medium. This phenomenon is known as Reflection.

## Laws of Reflection



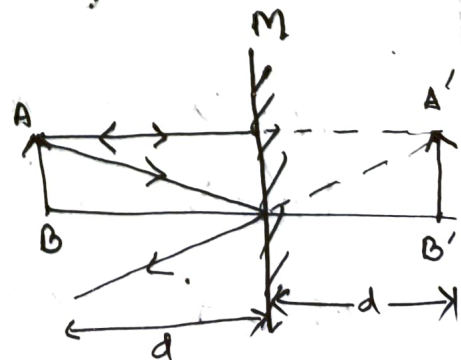
① The incident ray, reflected ray and Normal to the reflecting surface at the point of incidence all lie in the same plane.

② The angle of incidence,  $\angle i$  is always equal to the angle of reflection,  $\angle r$

$$\angle i = \angle r$$

## Reflection from a plane Mirror

\* The image is always erect, virtual and of same size as the object.



- ① The ray of light which falls on the mirror surface is called the incident ray. ~~The~~
- ② The point at which the incident ray falls on the mirror is called the point of incidence.
- ③ The ray of ~~of~~ light which is sent back by the mirror is called the reflected ray.
- ④ The 'normal' is a line at right angle to the mirror surface at the point of incidence.
- ⑤ The angle of incidence is the angle made by the incident ray with the normal at the point of incidence.
- ⑥ The angle of reflection is the angle made by the reflected ray with the normal at the point of incidence.

## Real and virtual image

If the light rays after reflection or refraction actually converge at a point, the image is said to be real. However if the rays do not actually converge but appears to do so and actually diverge, the image is said to be virtual.