

## Chapter 16 – Reflection of Light

### Vocabulary:

1. Luminous
2. Non-luminous
3. Reflection
4. Opaque
5. Transparent
6. Translucent
7. Regular reflection
8. Irregular reflection
9. Point of incidence
10. Normal
11. Angle of incidence
12. Angle of reflection
13. Lateral Inversion
14. Multiple reflection
15. Real Image
16. Virtual Image

#### 1. Define Object

'Object' may be defined as anything from which light rays are coming.

#### 2. Define Image.

An image may be defined as that point, where the light rays coming from an object meet or appears to meet after reflection or refraction.

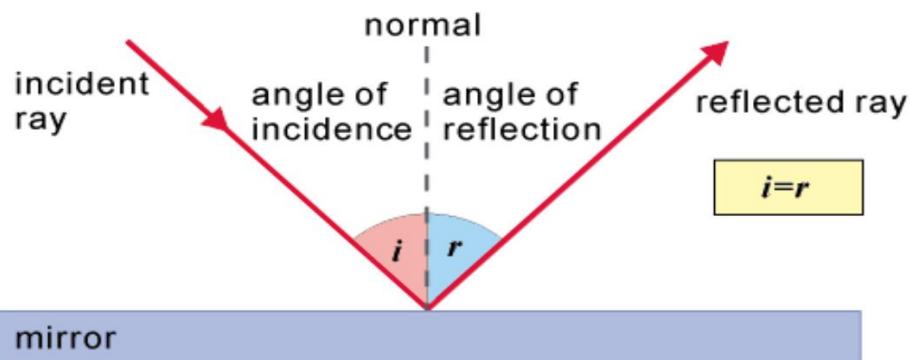
#### 3. First law of reflection

The angle of incidence is equal to the angle of reflection.

#### 4. Second law of reflection

The incident ray, the reflected ray, and the normal at the point of incidence lie on the same plane.

#### 5. Draw the diagram for first law and second law of reflection.



## 6. Differentiate Real and Virtual Image

Real Image	Virtual image
1. Light rays actually meet to form a real image.	1. Light do not actually meet to form a virtual image.
2. The image is generally inverted.	2. The image is generally erect.
3. Image can be obtained on the screen.	3. Image cannot be obtained on the screen.
4. This image is in front of mirror and behind the lens.	4. This image is behind the mirror and in front of the lens.
5. We can reach to it.	5. We can't reach to it.
6. E.g. :- Cinema screen	6. E.g. :- Our image in plane mirror.

7. In which direction will a ray of light falling along the normal to a mirror be reflected?

Ans: It will be reflected back along the same path

8. A boy is standing at a distance of 4m in front of a mirror. He moves 2m towards the mirror. In which direction will the image move ?

Ans: The image will move towards the mirror.

9. Assertion(A): Light always moves in a straight path

Reason(R): It has the property of rectilinear propagation of light

Ans: Both A and R are correct, and R is the correct explanation of A.

10. Assertion(A): an image formed by a mirror the left of the object appears on the right and the right appears on left.

Reason(R): This happened because of parallel inversion.

Ans: A is true, but R is false.

11. Explain why moon is non-luminous in nature.

Because it does not have light of its own, but reflects light from the sun.