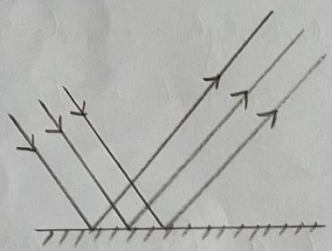
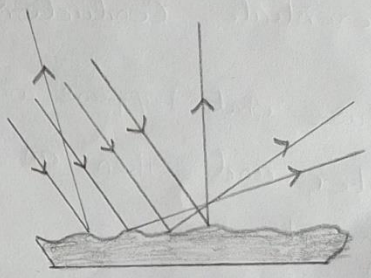
Ch 16: Reflection of light.

1. Differentiate luminous and non-luminous objects with examples.

2. What is reflection? State the two laws of reflection with labelled diagram.

3. Name the type of reflection in the following pictures.





4. List down the characteristics of an image formed with a plane mirror.

5. (i) Interchange of left and right of an image formed by a plane mirror

(ii) Kaleidoscope

(iii) periscope

(iv) Imaginary line drawn ⊥r to the surface at the point of incidence

(v) Bouncing back of light to the same medium

Reflection

Submarines

Lateral Inversion

Multiple reflection

Normal

6. Assertion (A): Light always travels in a straight path.
Reason (R): It has the property of rectilinear propagation of light.

7. 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.

8. Moon is non-luminous in nature. Explain.

9. How many images will be formed when two plane mirrors are kept at 45°?

Ch 17: Refraction and Dispersion of light

1. What do you mean by refraction of light? In which direction will light bend when travelling from an optically rarer medium to an optically denser medium?

2. Define dispersion. Give two examples.

3. Distinguish between Converging and diverging lenses.

4. Draw a labelled diagram of the eye and answer the following questions.
(a) From where does light enter inside the eye?
(b) Which muscles Control the focal length of the eye lens?
(c) Where is the image formed?

5. (i) Dispersion

(ii) Measure of speed of light — Refraction

(iii) Bending of light rays, when passing from one medium to the other medium. — persistence of vision

(iv) Magnifying lens — optical density.

(v) Image of an object formed on the retina, stays about $\frac{1}{16}^{th}$ of second — Sir Isaac Newton

Convex lens

6. Why does sky at sunset and sunrise appear to be orange-red coloured?

7. Complete the table for the images formed by a Convex lens.

position of the object	position of the Image	Nature of the Image	Size of the Image
i) beyond 2F			
ii) between F and O			

8. What would you do to see if the barber has cut your hair properly at the back?

9. What are Cones and rods? What are their functions?

10. How can you compare human eye with a photographic camera?