

**St. Andrews Scots Sr. Sec. School**  
**9th Avenue, I.P. Extension, Patparganj, Delhi – 110092**  
**Session: 2024 – 2025**  
**(Worksheet-13)**

**Class: VIII**

**Subject: Science**

**Chapter: Light**

**Q.1. Define:**

- a) Reflection
- b) Dispersion of light
- c) Myopia
- d) Hypermetropia

**Q.2. Fill in the blanks:**

- a) The ray of light which strikes the reflecting surface is called \_\_\_\_\_.
- b) \_\_\_\_\_ is the perpendicular line on the incidence point.
- c) When the mirrors are inclined at  $90^\circ$ , we get \_\_\_\_\_ images.
- d) The space between the cornea and lens is filled with a liquid called \_\_\_\_\_.
- e) Braille system was invented by \_\_\_\_\_.

**Q.3. Multiple Choice Questions:**

- a) Front bulged part of the eyeball is called
  - (i) cornea
  - (ii) iris
  - (iii) retina
- b) Type of mirror used as side view mirror is
  - (i) convex mirror
  - (ii) plane mirror
  - (iii) concave mirror.
- c) If you hold a pen in your right hand and stand in front of the mirror, the pen will be in the left hand in the image. This phenomenon is called
  - (i) lateral inversion
  - (ii) diffraction
  - (iii) reflection
- d) The nature of image formed by plane mirror is
  - (i) real and inverted
  - (ii) virtual and erect
  - (iii) real and erect.

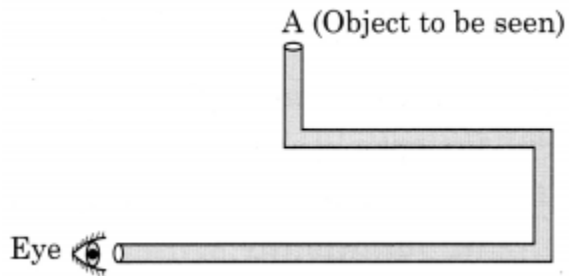
**Q.4. State whether the following statement is true or false.**

- a) Deficiency of vitamin B causes night blindness.
- b) Both incident ray and reflected ray lie in the same plane.
- c) Ciliary muscles changes the shape of the lens in the eye.
- d) In the Braille system, patterns are made with coloured dots.
- e) Kaleidoscope is based on the principle of dispersion of light.

**Q.5. Short Questions Answers:**

- a) Differentiate between rod and cone cells.
- b) What is the power of accommodation?

- c) Boojho planned an activity to observe an object A through pipes as shown in the given figure, so that he could see objects which he could not directly see.



- How many mirrors should he use to see the object?
  - Indicate the positions of the mirrors in the figure.
  - What must be the angle with respect to the incident light at which he should place the mirrors?
  - Indicate the direction of rays in the figure.
  - If any of the mirrors is removed, will he be able to see the object?
- d) Differentiate between regular and diffused reflection. Does diffused reflection mean the failure of the laws of reflection?