

WORKSHEET CLASS 8 LIGHT

Q1. Suppose you are in a dark room. Can you see objects in the room? Can you see objects outside the room? Explain.

Q2. Differentiate between regular and diffused reflection. Does diffused reflection mean the failure of the laws of reflection?

Q3: Mention against each of the following whether regular or diffused reflection will take place when a beam of light strikes. Justify your answer in each case.

- (a) Polished wooden table
- (b) Chalk powder
- (c) Cardboard surface
- (d) Marble floor with water spread over it
- (e) Mirror
- (f) Piece of paper

Q4: State the laws of reflection.

Q5: Describe an activity to show that the incident ray, the reflected ray and the normal at the point of incidence lie in the same plane

Q6: Fill in the blanks in the following:

(a) A person 1 m in front of a plane mirror seems to be _----- from his image.

(b) If you touch your _----- _ ear with right hand in front of a plane mirror it will be seen in the mirror that your right ear is touched with __----- _.

(c) The size of the pupil becomes _----- _ when you see in dim light.

(d) Night birds have _----- _ cones than rods in their eyes.

Choose the correct option in Questions 7 - 8

Q7. Angle of incidence is equal to the angle of reflection

- (a) Always
- (b) Sometimes
- (c) Under special conditions
- (d) Never

Q8. Image formed by a plane mirror is

- (a) virtual, behind the mirror and enlarged
- (b) virtual, behind the mirror and of the same size as the object
- (c) real at the surface of the mirror and enlarged
- (d) real, behind the mirror and of the same size as the object.

Q 9. What is the angle of incidence of a ray if the reflected ray is at an angle of 90° to the incident ray?

Q10. How many images of a candle will be formed if it is placed between two parallel plane mirrors separated by 40 cm?

Q11. (a) Find out the position of the image of an object situated at A in the plane mirror.

- (b) Can Paheli at B see this image?
- (c) Can Boojho at C see this image?
- (d) When Paheli moves from B to C, where does the image of A move?

B (Paheli) A C (Boojho) mmm Fig. 16.21

