

QUIZEN(Solution) – Light CBSE10P01.1

Learning Level 1	Learning Level 2	Learning Level 3
Q - Remembering (knowledge-based questions) U - Understanding (comprehension-based questions)	I - Applying (application-based questions) Z - Analyzing (analysis-based questions)	E - Evaluating (evaluation-based questions) N - Creating (creation-based questions)

Learning Level 1

1. Reflection of light is the bouncing back of light rays from a surface when they encounter it.
2. Focal length of a spherical mirror is the distance between the pole and the focus of the mirror.
3. The mirror formula is given by $1/f = 1/v + 1/u$, where f is the focal length of the mirror, v is the distance of the image from the mirror, and u is the distance of the object from the mirror.
4. The angle of incidence would be 30 degrees on the plane mirror.
5. The pole of a spherical mirror is the geometric center of the mirror's reflecting surface.

Learning Level 2

1. The object must be placed beyond the center of curvature of the concave mirror.
2. The statement is justified as a convex mirror always diverges the incoming rays of light and never converges them.
3. The object should be placed at the focus of the concave mirror.
4. It means that the image formed by the mirror is twice the size of the object and it is inverted.
5. The statement is justified as the reflected rays always diverge and never converge, thereby forming a virtual image.

Learning Level 3

1. The student can perform the experiment by placing an object at different distances from the mirrors, and by measuring the distances of the object and the image from the mirror. Using the mirror formula, the focal length of each mirror can be calculated.
2. If the distance between the object and the mirror is doubled, the image will become half in size.
3. The student can perform the experiment by placing an object at different distances from the mirrors, and by measuring the distances of the object and the image from the mirror. Using the mirror formula, the focal length of each mirror can be calculated.
4. The object should be placed at a distance of 5 cm from the mirror.
5. The student can place the convex mirror in front of the object, such that the virtual image formed by it coincides with the real image formed by the concave mirror.

