

Reflection by Mirrors

Chapter 10: Light: Mirrors and Lenses · Topic 1

Key Concept

A concave mirror is used in torches, headlights, and shaving/makeup mirrors, since it can focus light into a beam or magnify a close-up view. A convex mirror is used as a rear-view mirror in vehicles and in shops for security, because its wider field of view (though images appear smaller) allows a driver or shopkeeper to see a larger area behind or around them, improving safety and awareness.

Quick Revision Notes

- Concave mirror: can form real, inverted (far object) or virtual, magnified (close object) images.
- Convex mirror: always forms a virtual, diminished, upright image, regardless of distance.
- Concave mirrors used in torches, headlights, shaving mirrors.
- Convex mirrors used as vehicle rear-view mirrors and shop security mirrors for a wider field of view.

Practice Questions

- 1 State one use of a concave mirror.
- 2 Explain why convex mirrors are preferred for vehicle rear-view mirrors.
- 3 Describe the type of image formed by a concave mirror when the object is very close to it.