CLASS: VII **SUBJECT:SCIENCE**

CHAPTER-15. LIGHT

MODULE:2/3

SPHERICAL MIRRORS

- **Spherical mirrors are curved mirrors.**
- **Spherical mirrors are of two types depending upon the surface which acts as reflecting surface.**

ACTIVITY: Take a stainless steel spoon. Bring the outer side of the spoon near your face and look into it.

OBSERVATION: We see our image on the surface of spoon , but this image is different from that formed by a plane mirror. Similarly inner side of the spoon also acts as a mirror but the surfaces are curved .The outer and inner surface of the spoon act as two different types of mirrors.

- **Concave mirror: If the reflecting surface of a spherical mirror is concave,it is called a concave mirror.For example the inner surface of a steel spoon acts like a concave mirror.**
- **Convex mirror: If the reflecting surface of a spherical mirror is convex, then it is called a convex mirror. For example the outer surface of a steel spoon acts like a convex mirror.**

TYPE OF IMAGE FORMED BY CONCAVE MIRROR

- **The image formed by a concave mirror can be smaller , same size or larger than the object.**
- **The image can be real or virtual .**
- **The image can be erect or inverted.**

NOTE:As the object is brought closer to a concave mirror , the image formed moves away from the mirror. And initially the image is real and inverted but when the object is much closer to the concave mirror , then the image is erect and virtual.

USES OF CONCAVE MIRROR

- **Doctors use concave mirrors for examining eyes ,ears , nose and throat.**
- **Dentists use concave mirrors to see enlarged image of teeth.**
- **Concave mirrors are used as reflectors in torches ,headlights of cars and scooters.**

TYPE OF IMAGE FORMED BY CONVEX MIRROR

- **The image formed by a convex mirror is virtual.**
- **The image is erect.**
- **The convex mirror always forms image smaller than the object.**

USES OF CONVEX MIRROR

- **Convex mirrors are used as side mirrors in cars and scooters.**
- **Convex mirrors can form images of objects spread over a large area. So these mirrors help the drivers to see the traffic behind them**

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