

- The curved surface of a shining spoon can also act as a curved mirror. The most commonly used curved mirror is the spherical mirror. The reflecting surface of such mirrors forms a part of the surface of a sphere.
- Curved mirrors are of two basic types: those that diverge parallel incident rays of light and those that converge parallel incident rays of light.
- One of the easiest shapes to analyze is the spherical mirror. Generally such a mirror is not a complete sphere, but a spherical cap — a piece cut from a larger imaginary sphere with a single cut.

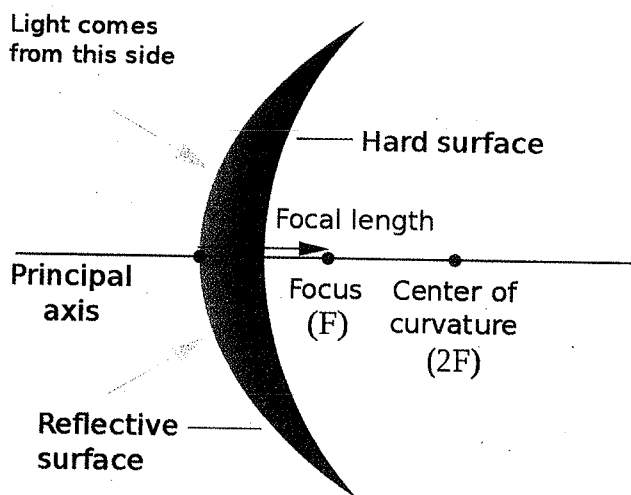


IMAGE 7.1: CURVED SPHERICAL MIRROR

Concave mirror

- A spherical mirror whose outer surface is polished and the inner side is the reflecting surface is called a **concave mirror**.
- The type of image produced by a concave mirror depends upon the location of the object relative to the focal point and center of curvature. Real images are formed if the object is beyond the focal point.

Convergence of light

- A concave mirror is also known as a **converging mirror** as it converges the incident rays after reflection.

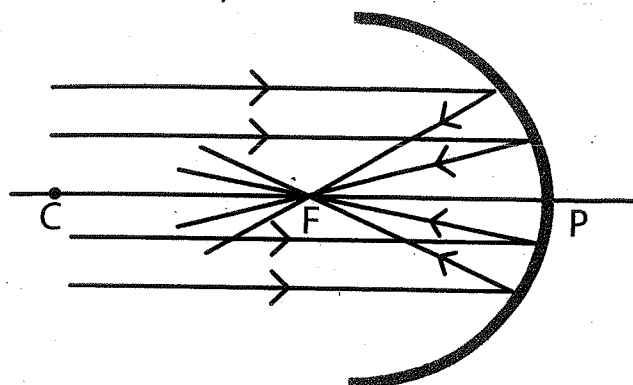


IMAGE 7.2: CONCAVE MIRROR

Convex mirror

- A spherical mirror, whose inner is polished and outer side is the reflecting surface is called **convex mirror**.
- Convex mirrors always produce images that are virtual, upright and smaller. Since the mirror is convex the center of curvature is behind the mirror and so is the focal point. Both values are negative when used in the mirror equation.

Divergence of light

- A convex mirror is also known as a **diverging mirror** as it diverges the incident rays after reflection.

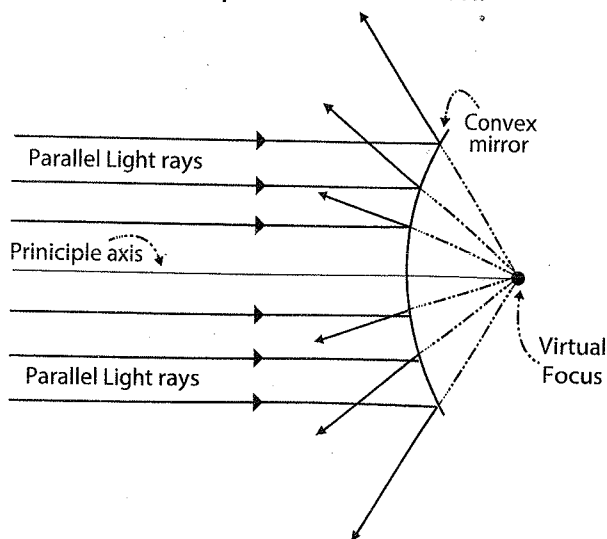


IMAGE 7.3: CONVEX MIRROR