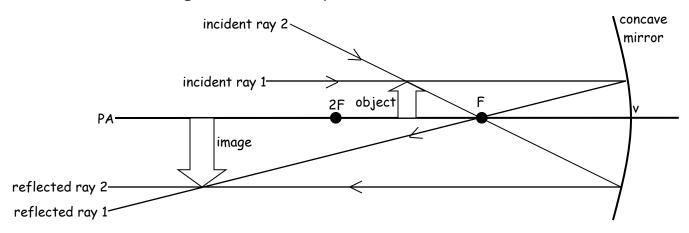
## **Concave Mirrors**

• Concave mirrors curve inwards like a cave.

## Drawing a Concave Mirror Ray Diagram

- 1. When the incident ray runs parallel to the principal axis (PA), the reflected ray always passes through the focal point (F).
- 2. When the incident ray goes through the focal point (F), the reflected ray runs parallel to the principal axis (PA).
- 3. Draw the image where the rays intersect.



• 2F is two times the focal length (f) and is also known as the centre of curvature (C)

## Uses of Concave Mirrors

- Concave mirrors are designed to collect light and bring it to a single point. Some examples include telescopes and solar ovens.
- Concave mirrors can also be used to send out beams of light rays. Some examples include flashlights and headlights of a car.
- Concave mirrors can also be used to enlarge images like in cosmetic mirrors.