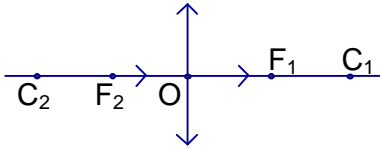


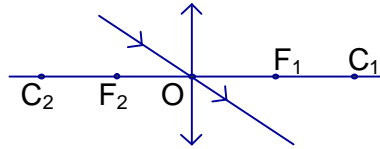
CONVEX LENS – FORMATION OF IMAGE – PLACE OF IMAGE – RAY DIAGRAMS

BEHAVIOUR OF LIGHT RAYS WHICH INCIDENT ON THE LENS

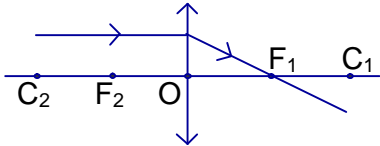
- Any ray passing along the principal axis is undeviated, after refraction.



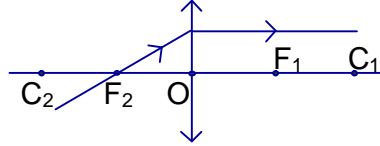
- Any ray passing through the optical centre is undeviated, after refraction.



- Any ray which is passing parallel to the axis will pass through the focus, after refraction.



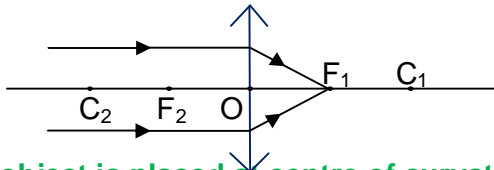
- Any ray passing through the focus will move parallel to the axis, after refraction.



THE RAY DIAGRAMS FOR IMAGE FORMATION BY CONVEX LENS

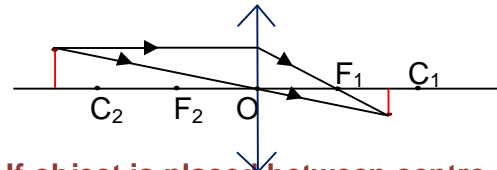
- If object is placed at infinite distance on the principal axis of a convex lens, the image will be collected at focus on other side.

Properties of image: highly diminished, inverted, real



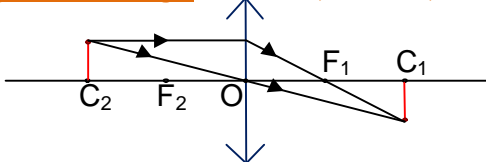
- If object is placed beyond centre of curvature on the principal axis of a convex lens, the image will be collected between centre of curvature and focus on other side.

Properties of image: diminished, inverted, real



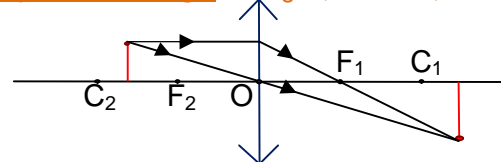
- If object is placed at centre of curvature on the principal axis of a convex lens, the image will be collected at centre of curvature on other side.

Properties of image: Same size, inverted, real



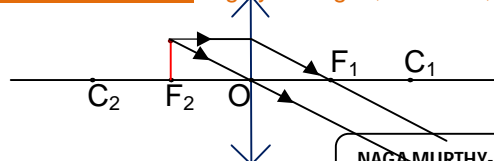
- If object is placed between centre of curvature and focus on the principal axis of a convex lens, the image will be collected beyond centre of curvature on other side.

Properties of image: Enlarged, inverted, real



- If object is placed at focus on the principal axis of a convex lens, the image will be collected at infinite distance on the other side.

Properties of image: Highly enlarged, inverted, real



- If object is placed between focus and optical centre on the principal axis of a convex lens, the image will be collected at object's side.

Properties of image: Enlarged, erect, virtual

