

CLASS-10
PHYSICAL SCIENCE
PERIOD PLANS

CHAPTER: 03 – REFLECTION OF LIGHT BY DIFFERENT SURFACES

PERIOD PLAN-06 : Reflection of light by Concave mirror –ray diagram
Reflection of light by Convex mirror –ray diagram

Content Analysis	Class Room Environment	Teaching Learning Material
<p><u>Reflection of light by Concave mirror –ray diagram:</u> The place where the object at infinite distance is collected on the screen is the focus of the mirror. The distance between pole and focus is called focal length of the mirror. nagamurthy.weebly.com That means the distance between centre of V-stand and screen is called focal length of the mirror.</p>	<p>Activity-10: Put a concave mirror on V-stand opposite to a tree or an object in the class room. Put the screen opposite to mirror at some distance. Close the doors or windows at the back side of mirror. Adjust the place of screen to view the clear image of object. Observation: The image is seen clearly at a point and it is small and inverted and it is real image.</p>	<p>Concave mirror V-stand Screen</p>
<p>In case of concave mirrors parallel rays coming from infinity converges after reflection in front of the mirror. Thus the focus lies in front of the mirror. Focal length is equal to half of the radius of curvature. All the parallel rays to the principal axis get reflected and converges at focus. So the concave mirror is called as converging mirror.</p>	<p>Conversation: about where the focus is located. How can we find the focus? How to draw ray diagrams?</p> <div style="display: flex; justify-content: space-around;"> </div>	<p>chart</p>
<p><u>Reflection of light by Convex mirror –ray diagram:</u> In case of convex mirrors parallel rays coming from infinity appear to be diverging from behind the mirror. Thus the focus lies behind the mirror. Focal length is equal to half of the radius of curvature. All the parallel rays to the principal axis get reflected and diverges and they seem to be come from focus. So the concave mirror is called as diverging mirror.</p>	<p>Conversation: about where the focus is located. How can we find the focus? How to draw ray diagrams?</p> <div style="display: flex; justify-content: space-around;"> </div>	<p>chart</p>