CLASS-10
PHYSICAL SCIENCE
PERIOD PLANS

## CHAPTER: 03 - REFLECTION OF LIGHT BY DIFFERENT SURFACES

PERIOD PLAN-04: Formation of image by plane mirror
Characteristics of image - Size, Distance - lateral inversion

| Content Analysis | Class Room Environment | Teaching <br> Learning <br> Material |
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| Formation of image by plane mirror: <br> A mirror having a flat surface is called plane mirror. | Activity-8: Observing the images of alphabet and words in plane mirror. Observation: Observe the size of image is same of object. Lateral inverted image. |  |
| Characteristics of image: <br> (i) A plane mirror always form virtual and erect image. <br> (ii) The distance of image and that of object equal from the mirror. nagamurthy.weebly.com <br> (iii) The image formed by a plane mirror is always laterally inverted. | Conversation: About the characteristics of image formed by plane mirror. <br> Extra activity: Writing the names of students in the class as the names appeared in the mirror. |  |
| Size, Distance - lateral inversion: <br> O is a point object. Some rays from O reach the mirror and get reflected. The reflected rays seem to be coming from the point I . So I is the image of O . Observe the distances of object O and image I from the surface of the mirror. The distances are equal. <br> Let us assume that an object $\left(\mathrm{OO}^{\mathrm{I}}\right)$ is kept in front of a mirror. The rays coming from the point O get reflected from the mirror and seem to be coming from the point I. So we say $I$ is the image of $O$. The rays coming from the point $\mathrm{O}^{1}$ get reflected from the mirror and seem to be coming from the point $\mathrm{I}^{\mathrm{I}}$. So we say $\mathrm{I}^{\mathrm{I}}$ is the image of $\mathrm{O}^{\mathrm{I}}$. The rays coming from the middle part of the O and $\mathrm{O}^{\mathrm{I}}$ will form their own images between I and $\mathrm{I}^{\mathrm{I}}$. Thus, $\mathrm{II}^{\mathrm{I}}$ is the image of the object $\mathrm{OO}^{\mathrm{I}}$. <br> The size of the image equal to the size of the object. |  |  |
| Right left inversion of an image formed by a plane mirror. The light rays which come from our right ear get reflected from the plane mirror and reach our eye. Our brain feels that the ray (reflected ray) is coming from the inside of the mirror. That is why our right ear looks like left ear in the image. |  |  |

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