

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Light

Q1. Show that the image is at the same distance behind the plane mirror as the object is in front of it.

Ans. \_\_\_\_\_  
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Q2. Show how light gets reflected from a plane mirror with the help of an activity.

Ans. \_\_\_\_\_  
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## Light

Q1. Show that the image is at the same distance behind the plane mirror as the object is in front of it.

Ans. Take a chess board. Draw a thick line in the middle of it. Fix a plane mirror vertically on this line. Place a pencil sharpener, at the boundary of the third square counting from the mirror. Note the position of the image. Now shift the object to the boundary of the fourth square. Again note the position of the image. We will find that the image is at the same distance behind the mirror as the object is in front of it.



Q2. Show how light gets reflected from a plane mirror with the help of an activity.

Ans. Take a torch. Cover its glass with a chart paper which has three slits. Spread a sheet of chart paper on a smooth wooden board. Fix a plane mirror strip vertically on the chart paper. Now direct the beam of light on the mirror from the torch with slits. Place the torch in such a way that its light is seen along the chart paper on the board. Now adjust its position so that the light from the torch strikes the plane mirror at an angle. We will see that the mirror change the direction of light that falls on it. Now move the torch slightly to either side. We will see change in the direction of reflected light too. Look into the mirror along the direction of the reflected light. We see the slits in the mirror. This is the image of the slits. This activity shows how light gets reflected from a plane mirror.

