

3. Now explore what happens If the pinhole size is smaller and larger respectively?
Ans We see in pinhole camera with smaller pinhole size seems to be lesser Illummination.

We see in pinhole camera with larger pinhole size seems to be Illummination.

We see light in pinhole camera with larger pinhole size seems to be light with small Image. The light have Illummination.

We see light in pinhole camera with smaller pinhole size seems to be dark with long Image. The light have lesser Illummination.

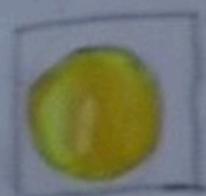
c) If the Illumination (brightness) of the object changes, if you look towards another object with lesser Illumination (brightness).

Ans. If we see Illumination of the object the object is seen to be clear and bright.

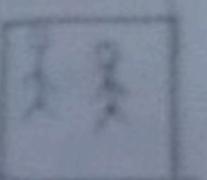
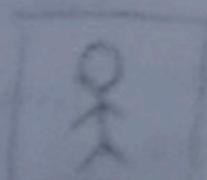
When we see Illumination of the object the object is seen to be blue and dark.



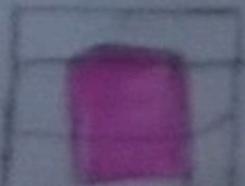
It can be seen in
pinhole camera
without moving



Can
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pinhole camera
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Ans. We do not
see any
distortion
only from
the eye



Causes of distortion

2 What happens to the Image.

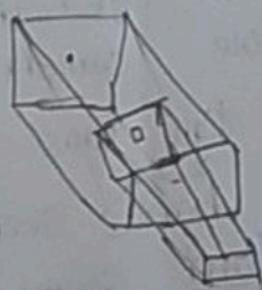
- A) If without changing the pinhole camera setting, you move further away from the object? Compare your Image in terms of what view is covered now and before, size of Image.
- Ans: When we cannot change the pinhole camera settings, the Image is seen to be big and some part only visible. And we move some further away from the object. The object is seen to be small and covering total part is visible.

Ex: If any two persons standing opposite to the pinhole camera. we do not move we see in pinhole camera only one person will be visible. when we move some further away from the two persons we see in pinhole camera two persons are visible.

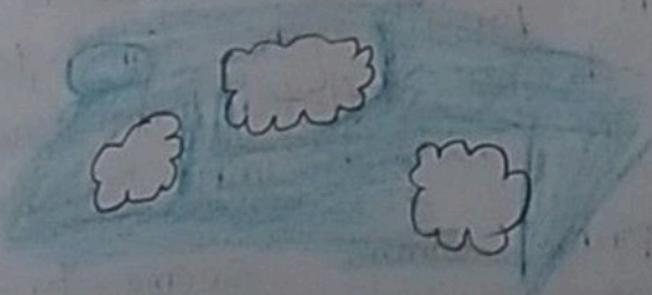
- B) If you Increase the distance between the pinhole and the screen.

Ans: When we Increase the distance between the Pinhole and the screen the Image is seen to be in big size (Zoom).

When we decrease the distance between the pinhole and the screen the Image is seen to be in small size.



Pin hole camera



when we see in pinhole camera
trees and sky the picture look like
inverted image.

i) What has changed from object to the Image? can you describe the changes and think of reasons?

Ans In pinhole camera the light was reflected. In some pinhole camera we see in pinhole camera with our eye. The eye will be reflected. In mirror the light was reflected. we see in mirror our right hand seems to be left hand and our left hand seems to be right hand. In some pinhole camera we see in pinhole up part the Image will be reversed the look like down part and down part. In pinhole passing light camera the translucent screen is partially the light is some reflected and some do not reflected that's why the Image is seen in Inverted Image. Inverted

While upside down a pinhole camera seems to be giving us turing right hand into left hand and the left into right hand. we will learn more about this in higher classes.

Science

Project

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