

Pinhole Camera [Experiment]

The word camera is derived from the Greek word *kamara*, meaning “vaulted room.” Royalty in the 16th century were entertained by the “camera obscura” – a large “pinhole camera” without the film.

Answers to the Questions

- 1-4. Image is inverted in all directions; up and down as well as left and right.
5. All distances are in focus. Actually the consideration is the size of the pinhole compared to the distance to the screen. So openings of a few centimeters act as pinholes if the screen distance is in meters. Openings in the leaves of trees act as pinholes, for example, and cast images of the sun on the ground!
6. A lens gathers more light and is brighter.
7. There is much in common with the eye and a pinhole camera. Image formation is much the same for each.