

Light

Camera Obscura

Make a simple instrument that demonstrates optics

You will need....

- ✓ Convex lens (10 cm)
- ✓ Tubing
- ✓ Box
- ✓ Grease proof paper

Background:

The term “camera obscura”-meaning dark room-was first used by the German astronomer Johannes Kepler in the early 17th century.

Follow these steps:

1. Construct the camera obscura by assembling the parts as shown.
2. The box has a hole cut into one end to fit the focussing tube; the other end of the box is open and the screen is inserted.
3. The inverted real image can be viewed on the screen.

What next?

1. Many people have speculated that Dutch artist Johannes Vermeer (1632-75) used a camera obscura to help him create his paintings e.g. 'The Music Lesson'. If so, he had to paint the pictures upside down.

