

How Does a Magnifying Glass Work?

A convex lens is used in a hand lens or magnifying glass. This lens, held in the hand, is used to magnify small objects by making these objects look larger to the eye. The magnification will depend upon where the lens is between your eye, the object you are looking at, and the total distance between the two. The thicker part in the center of the convex lens gathers light from a wide area and condenses it so the image on the other side is sharp and bright. In the figure below, you see that light travels parallel to the lens axis and passes through the lens (thicker part in the center) where the light is focused to a spot on the axis a certain distance behind the lens.

Magnifying lenses have low magnification powers – typically 2x-5x. Check out the interactive link to see how magnification occurs with a hand lens -

<http://www.micro.magnet.fsu.edu/primer/java/scienceopticsu/microscopy/simplemagnification/>

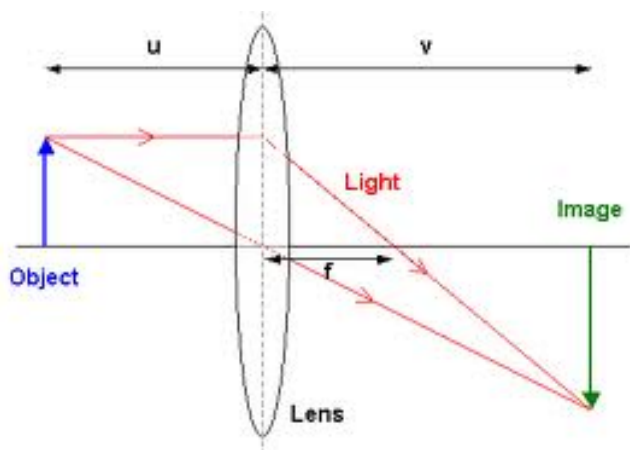


Image from: <http://www.doitpoms.ac.uk/tlplib/diffraction/printall.php>