

Mini-Lab: Lenses

1. Measure the focal length of each “boxed” lens by projecting the outdoors onto a screen.
2. On a lab table, measure distance to object, distance to image for several trials and use these values to calculate focal length of each lens – compare to direct observation.
3. Using each lens, calculate a situation in which you could project an image onto a screen with a magnification of 1.5. Then try it and record a description of the result – how well it worked.
4. Challenge: design an experiment or observation to somehow determine numerically the focal length of the diverging lens – show work and/or explain.