

Optics: Objectives and Vocabulary

By referring to the various handouts, notes, lab activities and homework covered during this unit, then at the end of this unit of study, each student should be able to:

1. Explain what 'optics' is the study of.
2. Measure angles of rays of light reflected from mirrors.
3. Explain the law of reflection.
4. Know how light is reflected and refracted with different shape lenses and mirrors.
5. Explain which types of images are able to be focused and projected, and the types of mirrors and lenses that can do it.
6. Know what nearsightedness and farsightedness are, and how they are corrected.
7. Know what optical elements are in various optical devices like telescopes, microscopes and binoculars.
8. Explain polarized light, fiber optics, and lasers and how they're used in common devices like sunglasses, CD and DVD players, and endoscopes.

Vocabulary:

Optics	Real focus	Normal
Plane mirror	Real image	Nearsightedness
Concave mirror	Virtual focus	Farsightedness
Convex mirror	Virtual image	Laser
Convex lens	Reflection	Endoscope
Concave lens	Refraction	Fluorescent
Diverge	Diffraction	Incandescent
Converge	Diffraction grating	Polarized light
Parallel	Focal length	Fiber optics
	Focal point	Total internal reflection