ASTR 130 Glossary for Telescope Optics Lab

angular resolution	Also called simply resolution. It is one of the two powers of a telescope. The angular size of the smallest feature that can be distinguished with a telescope.
chromatic aberration	An optical defect whereby different colors of light passing through a lens are focused at different locations.
eye relief	The distance between the eyepiece and the eye when proper viewing is achieved.
eyepiece lens	A magnifying lens used to view the image produced at the focus of a telescope.
field of view	The angular extent covered by the view through a telescope.
focal length	The distance from a lens or mirror to the point where converging light rays meet.
focal plane	The plane in which a lens or mirror forms an image of a distant object.
focal point	The point at which a lens or mirror forms an image of a distant point of light.
focus	The point to which light rays converge after passing through a lens or being reflected from a mirror.
imaging	The process of recording the image made by a telescope of a distant object.
lens	A piece of transparent material (usually glass) that can bend light and bring it to a focus.
light pollution	Light from cities and towns that degrades telescope images.
light-gathering power	A measure of the amount of light brought to a focus by a telescope.
magnification	The factor by which the apparent angular size of an object is increased when viewed through a telescope.
objective lens	Also called simply objective. The principal lens of a refracting telescope.
small-angle formula	A relationship between the angular and linear sizes of a distant object.
spherical aberration	An optical defect that results because lenses with spherical surfaces do not bring all light rays to the same focal plane.
subtend	To extend over an angle.