The eye is a complex and fascinating part of the human body. Here are some common terms to help you learn more about your eyes and vision.

**accommodation**: ability of the lens to adjust its shape for vision at various distances in order to produce a clear image on the retina

**anterior chamber**: space in front portion of the eye between the cornea and the iris and lens, which is filled with aqueous humor

**aqueous humor**: clear, watery fluid that fills the anterior chamber and the posterior chamber in the front part of the eye and provides nutrients to structures in the anterior chamber

**aqueous outflow pathway**: the main exit route of aqueous humor from the eye, including the trabecular meshwork and Schlemm’s canal

**astigmatism**: irregular curvature of the cornea or lens resulting in a distorted image because light rays are not focused on a single point on the retina

**binocular vision**: coordinated use of the two eyes to see a single fused three-dimensional image

**blindspot**: in testing the visual field, this is the blind area corresponding to the optic disk where the optic nerve fibers exit the eye and where there are no light-sensitive cells

**central visual field**: the area of objects in space seen without moving the head or eyes; corresponds to an area within 30° of the fixation point (fovea)

**choroid**: the middle layer of the eye containing blood vessels that furnish nourishment to the other parts of the eye, especially the retina

**ciliary body**: a ring of tissue between the iris and the choroid consisting of muscles and blood vessels that changes the shape of the lens and manufactures aqueous humor

**color vision deficiency (color blindness)**: inability to recognize certain colors, primarily red or green, but rarely blue

**cones**: cone-shaped light-sensitive cells in the retina particularly in the macula area; cone function predominates in daylight with a small pupil allowing one to make out details and shapes, especially colors (see diagram on page 3)

**congenital**: present at birth

**conjunctiva**: delicate tissue that lines the inside of the eyelids and covers the front part of the eye except the cornea

**cornea**: the clear curved structure that comprises the front of the eye, a refractive surface through which light enters

Definitions for labeled parts of the eye are highlighted in purple throughout glossary.
A Glossary of Eye and Vision Terms (Continued)

**degeneration**: tissue changes that make it less able to carry out its function

**depth perception**: the blending of slightly dissimilar images from the two eyes for the perception of three-dimensional depth

**diopter**: metric unit used to denote the refractive error of the eye or lens

**distance vision**: ability to distinctly perceive objects at a distance, usually tested at 20 feet

**farsightedness**: also called hyperopia; a refractive error in which the focal point for light rays is behind the retina; distant objects are seen more clearly than near objects

**focus**: the point at which light rays meet after passing through the cornea and lens; in normal eyes this point is on the fovea of the retina

**fovea**: A tiny spot located in the macula that is the area of clearest vision on the retina.

**hereditary**: appearing in, or characteristic of, successive generations; individual differences in human beings passed from parent to offspring

**incidence**: number of new cases of a particular problem or disease that occurs within a period of time

**iris**: colored circular membrane that is in front of the lens and controls the size of the opening at its center (pupil), thereby regulating the amount of light entering the eye

**laser**: surgical tool using an intense beam of light energy to close rips, make holes, destroy new vessels (photocoagulation), or to open channels as in the treatment of glaucoma

**legal blindness**: visual acuity that does not exceed 20/200 in the better eye with correcting lens; field of vision no greater than 20 degrees in its widest angle (visual acuity of 20/200 means that a person can see at a distance of 20 feet what one with “normal” sight can see at 200 feet)

**lens**: the transparent disc in the middle of the eye behind the pupil that brings rays of light into focus on the retina

**low-vision aids**: powerful optical devices useful to persons with vision impairments that are not successfully corrected by the usual prescription lenses

**macula**: the region of the retina that helps provide best central vision. The fovea is at the center of the macula

**myopia**: see nearsightedness

**nearsightedness**: also called myopia; a refractive error of the eye where the image of a distant object is formed in front of the retina and cannot be seen distinctly; near objects are seen more clearly than distant objects

**near vision**: the ability to perceive objects distinctly at normal reading distance (usually about 14 inches from the eye)

**night blindness**: condition in which sight is good by day but deficient at night and in any faint light

**optic disk**: head of optic nerve; formed by the meeting of all retinal nerve fibers in the retina

**optic nerve**: special nerve of sight beginning in the retina as the optic disk, which carries messages from the retina to the brain, resulting in visual images

**peripheral vision**: the ability to perceive the presence or motion of objects outside the direct line of vision

**presbyopia**: decreased elasticity of the lens due to advancing age which moves the near point of vision farther from the eye, making it difficult to focus on near objects

**prevalence**: total number of cases of a problem or disease in the population at a given time

**pupil**: the opening in the center of the iris that appears as a black dot and through which light enters the eye
refraction: measurement of the focusing characteristics of the eye to determine refractive error and the need for prescription glasses

retina: innermost layer of the eye containing lightsensitive nerve cells and fibers connecting with the brain through the optic nerve and nourished by a network of blood vessels; receives image and sends it to the brain

rods: light-sensitive cells in the retina that work best in darkness or dim illuminations

sclera: the white part of the eye; a tough covering that along with the cornea forms the external protective layer of the eye

severe visual impairment: inability to read ordinary newspaper print, even with the aid of glasses, and impairment indicating no useful vision in either eye; includes those who are legally blind

20/20 vision: the ability to correctly perceive an object or letter of a designated size from a distance of 20 feet; normal visual acuity

visual acuity: measurement of the ability of the eye to perceive the shape of objects in the direct line of vision and to distinguish detail; generally determined by finding the smallest symbol on an eye chart that can be recognized at a given distance

visually impaired: persons who have some difficulty seeing with one or two eyes even when wearing glasses

vitreous body: transparent colorless mass of soft, gelatinous material filling the globe of the eye between the lens and the retina