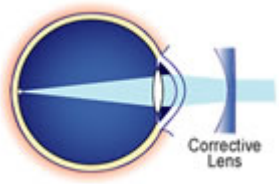
Glasses for Vision Correction

Glasses are the most common vision aid for correcting eyesight, due to the low cost, ease of use, safety and suitability for severe refractive errors and other health conditions. Glasses are also sutable for people of all ages.

All options should be discussed with an optician or eye care practitioner.

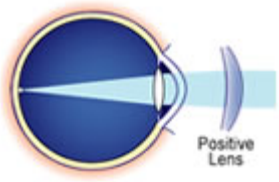
Glasses lenses correct refractive errors by focusing light directly on the retina. The type of lens depends on the type and severity of the refractive error.

The strength of a lens is measured in diopters. This measurement indicates the required refraction by the lens inorder to focus images directly on the retina. The stronger the lens, the higher the measurement.

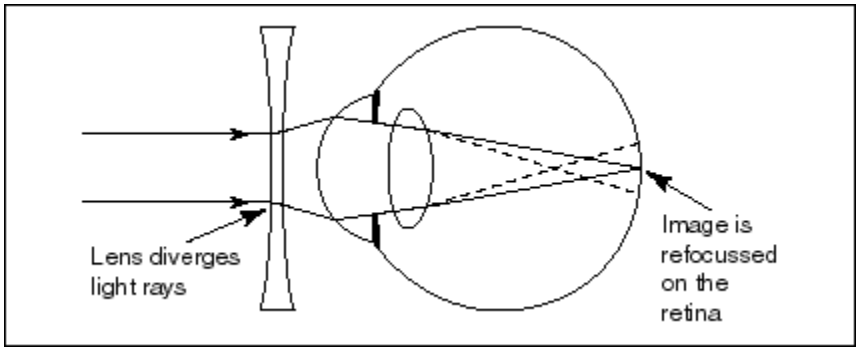


The type of refractive error determines the shape of the lens. A concave lens is used to correct myopia (short sight) and the measurement for short sight is negative. Concave lenses are thiner in the center and thicker towards the edges as shown above, so that light rays are diverged (spread out), enabling the eye's lens to focus the rays directly on the retina.

A convex lens is used to correct hyperopia (long sight) and this measurement is positive. This lens is thicker in the center. Light rays are converged enabling the eye's lens to focus them on the retina.



Source: http://www.eye-directory.com/eye_correction/glasses.htm



Source: http://www.myopia.org/myopia2.htm