**DEFECTS OF THE EYE**

**Myopia - Short Sight**

myopia defect

Those who suffer from myopia can see near objects clearly, but not the far away objects. The light that comes from far away objects, as the following image shows, focuses in front of retina, rather than on the retina, that leads to a blurry image of the object in question.

There are two possible causes behind the defects: the high refractive index of the lens or longer eyeball or both.

In order to rectify the defect, glasses with concave lenses must be worn; such lenses diverge the light from distant objects in such a way that the refracted rays finally fall on the retina.

**Hyperopia - long sight**

**hyperopia defect**

Those who suffer from hperopia can see distant objects clearly, but not the near objects. The light that comes from far away objects, as the following image shows, focuses behind the retina, rather than on the retina, that leads to a blurry image of the object in question.

There are two possible causes behind the defects: the low refractive index of the lens or shorter eyeball or both.

In order to rectify the defect, glasses with convex lenses must be worn; such lenses converge the light from near objects in such a way that the refracted rays finally fall on the retina.