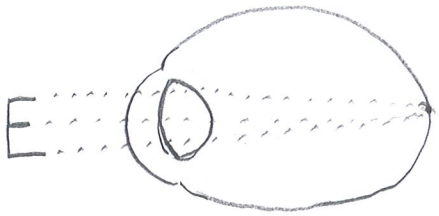
Dr. Kelly

Focusing Images on the Retina (Fovea)

I. Distant objects (normal)

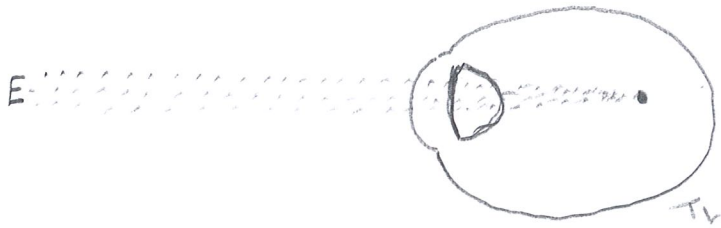
For distant objects, the light rays need to be bent minimally so the lens is flattened.

II. Near objects (normal)



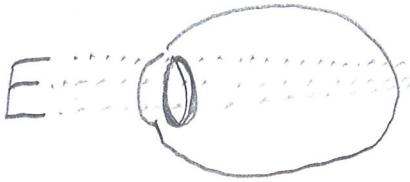
For near objects, the light rays must be bent to a much greater degree. To do so, the ciliary muscle contracts and the lens becomes more rounded.

III. Near-sighted (myopic)



For people who are near-sighted, their eye focuses light rays <u>too strongly</u> for objects at a distance. Therefore, the focused image does not fall on the retina and appears blurry. This is not an issue for near objects (see above).

IV. Far-sighted (hyperopic)



For people who are far-sighted, their eye focuses light rays <u>too weakly</u> for near objects. Near objects will appear blurry. This is not an issue for far objects (see above).