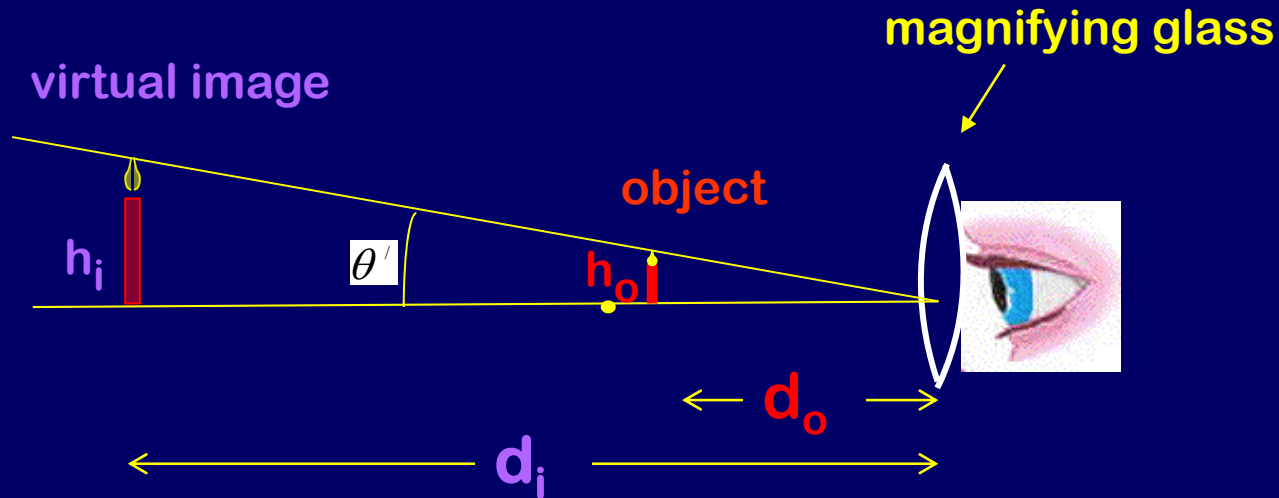# Magnifying Glass

Magnifying glass produces virtual image behind object, allowing you to bring object to a closer d_o: and larger θ'

Compare to unaided eye: $\theta = \dfrac{h_0}{d_{near}}$

$$\theta' = \frac{h_i}{d_i} = \frac{h_o}{d_o}$$

Ratio of the two angles is the <u>angular magnification</u> M:

$$M = \frac{\theta'}{\theta} = \frac{h_o/d_o}{h_o/d_{near}} = \frac{d_{near}}{d_o}$$