

## Refraction through a series of layers

There is no internal reflection.

$n \sin \theta$  transfers across each layer, so only the first and final indices are needed

$$n_i \sin \theta_i = n_f \sin \theta_f$$

$$n_i = 1$$

$$n_f = 1.71$$

$$\theta_i = 40^\circ$$

$$\theta_f = \sin^{-1} \left[ \frac{n_i}{n_f} \sin \theta_i \right]$$

$$\theta_f = 22.1^\circ$$