

### 3-2. Bragg's Law limits

For X-rays of wavelength  $\lambda = 1.5 \text{ \AA}$ , what is the smallest Bragg plane  $d$  spacing which could produce a diffracted ray? In what direction with respect to the incident beam is this diffracted ray going?

Make a drawing to show this, including direction of incoming and "reflected" rays.

What is the longest wavelength of x-rays which will diffract from a crystal with largest Bragg plane  $d$  spacing =  $100 \text{ \AA}$  ?