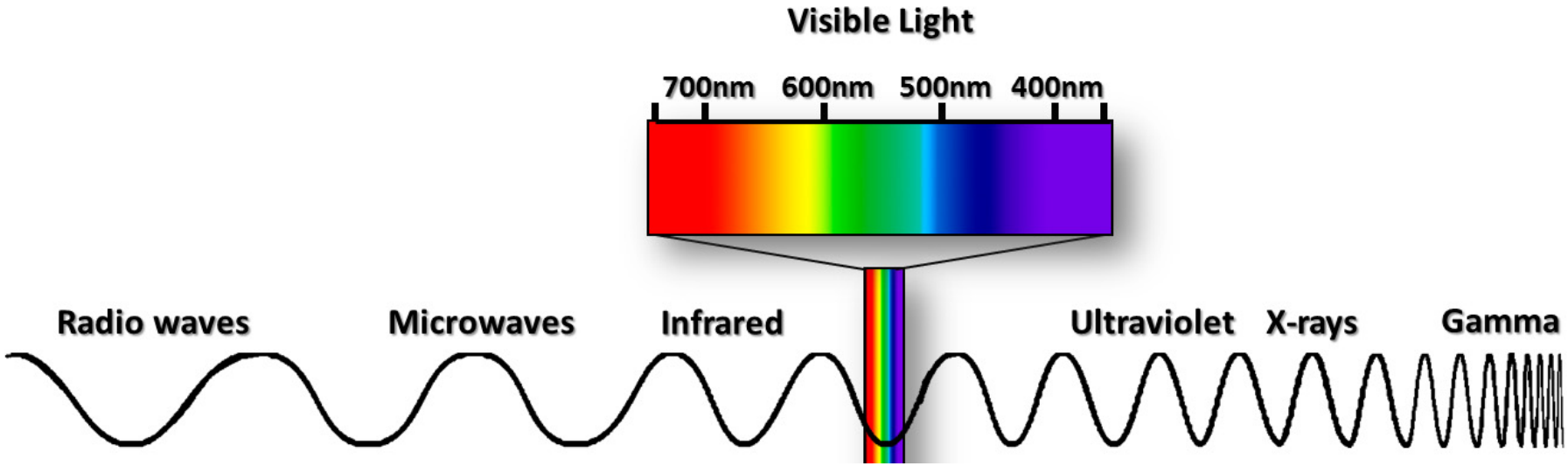
Another problem at the time had to do with light…

Draw this diagram with color!

The Electromagnetic Spectrum



To be completed in class!
(leave 2-3 lines for labeling below)

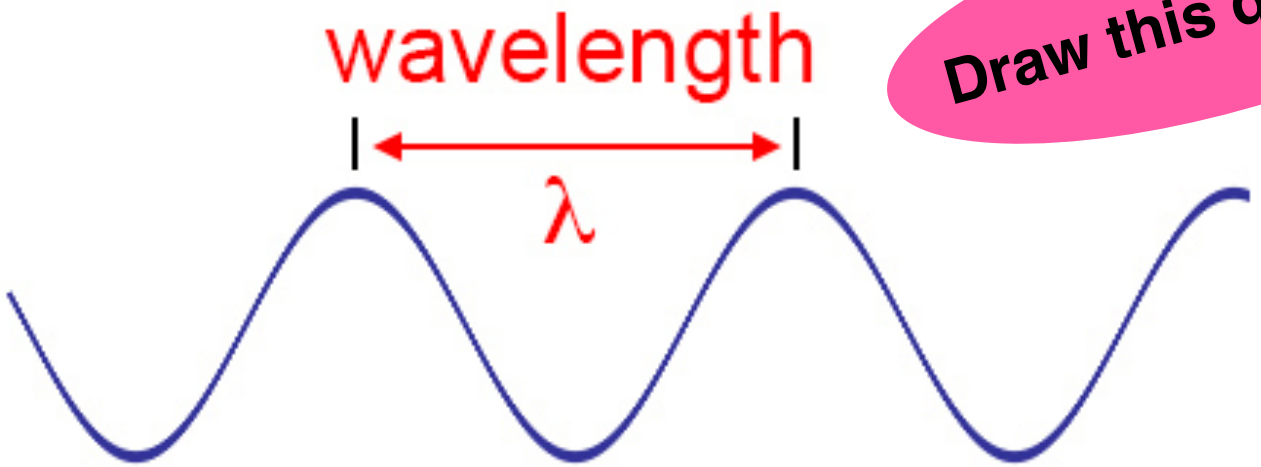
$$c = \lambda v$$

c = speed of light (all light travels at this speed)

$c = 3.0 \times 10^5$ km/s (186,000 mi/s)

λ = wavelength (distance from peak to peak)

v = frequency (number of waves passing a point in a certain time)



Draw this diagram!

Two Problems

1. Why don't negative electrons crash into the positive nucleus?

2. What causes elements to emit a characteristic spectrum of colored lines?

A new model solved <u>BOTH</u> problems!