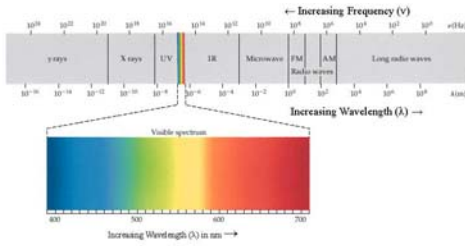


History, Experiments, and Key Points of the Development of The Atomic Theory

Chapter 5

The Electromagnetic Spectrum (Light)



What's the difference in a discrete vs. continuous spectrum?

Draw a diagram showing light as a wave, labeling wavelength (λ), frequency (f or ν), and amplitude.

What is the wave equation? How are frequency and wavelength related? Show the values/units for c , λ , and f .

Max Planck and Quantized Energy



Approximate time period:

What were Planck's views on light and energy?

What were the results of his experiment?

Define Planck's equation for quantized energy. Label quantities and units:

Albert Einstein and the Photoelectric Effect

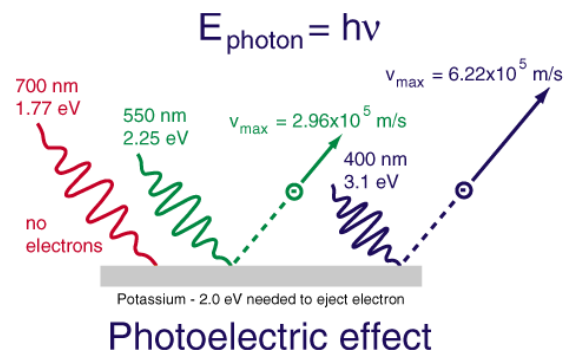


Approximate time period:

What is the photoelectric effect?

How did Einstein explain the photoelectric effect?

What implications did this have on how science explains light?

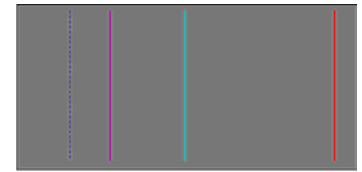
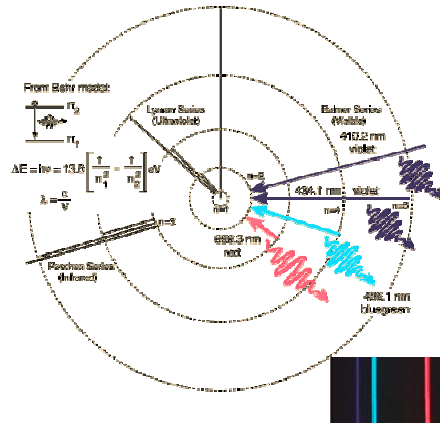


Neils Bohr and the Hydrogen Atom



Approximate time period:

Explain Bohr's Model



How does Bohr's model of the hydrogen atom explain the discrete spectrum of hydrogen?

What are the limitations of Bohr's model?

Schrödinger's Model



Approximate time period:

Who is Louis de Broglie and what were his contributions to this model?

What did Schrödinger do?

