

Name: _____

Class: _____

Due Date: _____

Physics Topic 65 – Compton Scattering

If you are interested in learning more about atomic, quantum, and nuclear physics then please read the book *The Quantum Story: A History in 40 Moments* by Jim Baggott.

Also watch all the videos from this website:

<https://www.learner.org/series/physics-for-the-21st-century/>

Answer the following questions.

1. C: Describe the *Compton effect*.

2. E: An incoming photon with a wavelength of 6.00×10^{-10} m strikes an electron at rest. The photon rebounds at an angle of 120. degrees to its original direction. Determine the speed and wavelength of the photon after the collision.

3. C: State two experiments in which light behaves as a wave. Do not explain the experiments, just state them.

4. C: State two experiments in which light behaves as a particle. Do not explain the experiments, just state them.