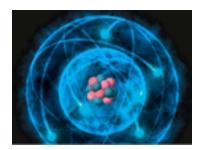
Dalton, Thompson, Bohr and Rutherford all improved upon or understanding of the atom through their experiments. Without their work our understanding of how the universe works would be much further behind and the world as we know it would be drastically different.

Your job is to describe the different experiments that these scientists did, what they discovered and explain how they contributed to our modern understanding of the atom. Use the rubric to check off the different criteria you will need in your paper.



4 / 100 – Distinguished Accomplishes all of the Proficient criteria as well as all of the Distinguished criteria. 3.67 / 95 – Exceeding Must accomplish all of the Proficient criteria as well as at least 3 of the Distinguished criteria. 3.33 / 90 – Advanced Must accomplish all of the Proficient criteria as well as at least 2 of the Distinguished criteria.	Student explains how Daltons theory of the atom applies to later atomic models. Student identifies Bohr's orbitals and electron behavior. Student uses the experiments to explain changes and/ or refinements of the atomic model. Student includes a self generated diagram and explanation of at least two of the experiments described in the sections that are loosely based off diagrams in the book or on the web but are not exact replicas. Student uses information from at least two additional resources found from books other than the text book or from the internet, and sites them correctly using MLA format. Student compares and contrasts information from the text with information found from other sources. No noticeable standard English conventions mistakes.
3 / 85 – Proficient Must accomplish all of the Proficient criteria.	Student states Daltons Atomic Theory Student identifies and describes Thompsons Plum Pudding Model. Student identifies and describes Bhor's model Student explains how Rutherford improved the plum Pudding Model of the atom. Describes the current model of the atom. Student determines the main ideas of the reading and uses them to explain, compare and contrast what each scientist found and how they found it. Student fully describes the relationships between the different discoveries of the atom and how each discovery built on the knowledge gained from the one before. Less than three standard English conventions mistakes.