Elements of Physics

Overview	Students will work as individuals at a computer with a printer nearby. They will complete the worksheet assigned by going onto Zoho Wiki and write a paper of their reflections about the atom. Then give a brief 2-3 minute summary of their paper to the class.
Objective	To define scientific ideas about the atom over the last century and understand the structure and different models that has been proposed through words and pictures.
Materials	• Atom and Molecule video held on Zoho Wiki • Computer with internet access • Print resources about the structure of the atom
Procedures	1. Give a hand out of a picture of an atom, different arrows with blank lines and questions about the structure and different models. 2. Tell them the history of an atom: • It evolved many years ago • Have them watch the segment " The ties that Bind" part of the program Elements of Physics Atoms and molecules • This movie can be found on the Zoho wiki site that you as a teacher created for the students. • The site includes many different sequential time lines about the atom along with pictures and labels. 3. Tell the students they will develop a "Pictorial history of changing ideas about the atom." Along with a five to seven page paper. 4. The paper should go into detail about the relationship between the nucleus and the electrons in the drawings of the model. 5. Give them this list of resources to help guide them with the drawing and paper. • http://molaire1.club.fr/e_histoire.html • http://everything2.com/index.pl?node=atom • http://www.lbl.gov/abc/wallchart/chapters/02/1.html • http://www.eurekalert.org/features/doe/2004-12/djna-emo122204.php • http://www.broadeducation.com/htmlDemos/AbsorbChem/HistoryAtom/page.htm • http://www.lbl.gov/abc/wallchart/chapters/02/4.html 6. Conclude the lesson by having other students show their pictures and give a 3-5 minute presentation to the class describing their reasoning behind the statement.
Evaluation	**Total assignment points:100** **Grammar – 20** **Content -70** - Students need to show a deep understanding of the scientific ideas about at atom; could describe in great detail the scientific purpose of each model of the atom; and put into words effectively.

Adapted from: http://school.discoveryeducation.com/lessonplans/programs/ep_matter/