

Abstract Submitted  
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**Atomic Structure and the Periodic Table** SHANNON PERRY,  
JAMES ESPINOSA, NOAH PINTO, Weatherford College — The current periodic  
table seen in physics and chemistry textbooks are direct descendants of the original  
scheme proposed by Mendeleev in the nineteenth century. With the advent of quan-  
tum mechanics, a better understanding of atomic structure was attained, allowing  
chemists in the 1930's to propose a better periodic table that allows students to see  
the chemical and physical periodicities of atoms. This new organization was called  
the 32 column atomic structure periodic table. In the 1960's, Linnett proposed a  
modification of the Lewis-Langmuir octet rule which allowed him to create molec-  
ular models that greatly reduced the use of the resonance. Luder quickly followed  
this development with a clear presentation of what a static picture of each element  
would look like, building on the cubical atom of Lewis. We have used VisualPython  
to create an interactive 32 column periodic table that allows students to see the  
Newtonian pictures of the chemical elements.

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