

Class: Chemistry

Unit: 03 - Chapter 3 Building Blocks of Matter

Target: 03 - 01 The student will describe how each of the parts of the atom was discovered and by whom. (Chapter 3:2, 4:1, 4:2)

Score	Description	Student Score
Exceeds Target (Exemplary) <ul style="list-style-type: none">• Deeper more rigorous thinking• Application to real world use, teach another person, use information to solve problems in a different context, explain connections between ideas, demonstrate a unique insight and/or creative application of skills.		
Mastery of Target (Application) Can apply target to new information.		
Proficient in Target <ul style="list-style-type: none">• Expected level of performance for all students• Consistent and Independent	(U03) Explain how Dalton's Atomic Theory applies to the modern understanding of the structure of the atom. (U03) Describe the contributions of Thomson, Millikan, Chadwick and Rutherford to the understanding of atomic structure. (U04) Explain how Bohr's model of the atom applies to electron energy. (U04) Explain how the Heisenberg Uncertainty Principle and Schrodinger's Wave Equations changed the model of atomic structure.	
Approaching Proficiency Basic learning necessary for foundation of target. <ul style="list-style-type: none">• Recall questions, fact-based skills, basic applications• Independent, not consistent	List the parts of Dalton's Atomic Theory. Explain how science theories change.	
Needs Development <ul style="list-style-type: none">• With help, can demonstrate some understanding of target		
No Evidence to Measure		

I can compare Dalton's Atomic Theory to our current understanding of atoms.

I can describe the experimentation and model of the atom created by JJ Thomson.

I can describe the contributions to the atomic model made by Robert Millikan.

I can describe the experimentation and model of the atom created by Ernest Rutherford and his associates.

I can explain the contributions made to the model of the atom by James Chadwick.

I can draw atoms using Bohr's model.

I can use Bohr's Model to calculate the energy of electrons.