



Edmore Public School
706 Main St, Edmore, ND 58330

**Chemistry Lesson Plans for
September 26 - 30, 2022
3rd Hour, 8:40 – 9:32 AM**

	Monday (Sept 26)	Tuesday (Sept 27)	Wednesday (Sept 28)	Thursday (Sept 29)	Friday (Sept 30)
Performance Standards	HS-PS3-3 Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy.	HS-PS3-3 Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy.	HS-PS3-3 Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy.	HS-PS3-3 Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy.	HS-PS3-3 Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy.
Topic	Atomic Theory and Rutherford's Experiment	Bohr's Model and Valence Electrons	Bohr's Model of Atom	Electron configuration Day 1	Electron Configuration Day 2
Objectives	<ul style="list-style-type: none"> explain our current understanding of the atom citing evidence from experiments. 	<ul style="list-style-type: none"> explain our current understanding of the atom by citing evidence from experiments they conduct 	<ul style="list-style-type: none"> explain our current understanding of the atom by citing evidence from experiments they conduct 	<ul style="list-style-type: none"> Students will be able to explain how electrons are located in energy levels and how to determine the number of valence electrons for atoms through completing an inquiry-style paper. 	<ul style="list-style-type: none"> Students will be able to explain how electrons are located in energy levels and how to determine the number of valence electrons for atoms through completing an inquiry-style paper.
Bellringer	(3 min) Proton, neutron, electron	(3 min) atomic mass	(3 min) plasma, compressibility	(3 min) Valence electron	(3 min) vocab quiz
Procedure/ Instructional Delivery	<ul style="list-style-type: none"> Engage: (5 min) Draw and label your interpretation of the atom in your science journals. "Why are there so many models of the atom"? Explore (30 min): Show the first four slides of the Atomic Theory ppt. Read the introduction for 	<ul style="list-style-type: none"> Engage (5 min): In their science journals, answer the following questions: "What did you learn about the atom from Rutherford's gold foil experiment?" and "What are some issues that were not explained in his experiment?" 	<ul style="list-style-type: none"> Engage (5 min): In their science journals, answer the following questions: "What did you learn about the atom from Rutherford's gold foil experiment?" and "What are some issues that were not explained in his experiment?" 	<ul style="list-style-type: none"> Engage (5 min) - Students review what they know about Bohr model by completing a worksheet Explore (25 min): Using the link https://elearning.cpp.edu/learning-objects/atomic-electron-configurations/, 	<ul style="list-style-type: none"> Engage (5 min): Answer the following questions: 1. How many valence electrons does it have? 2. Do a sketch of its atom (Bohr model) showing the electron shells. Explain (20 min): For the major part of the lesson students are

	<p>Rutherford activity. Do Rutherford investigation activity.</p> <ul style="list-style-type: none"> ○ Elaboration/Evaluation (10 min): answer the post investigation questions 	<ul style="list-style-type: none"> ○ Explain: (5 min) discussion from the warm-up leads directly into notes from the Atomic Theory ppt of the atom and the quantum mechanical model (slide 9) ○ Explore (20 min): Do Bohr Model Activity (see worksheet) ○ Evaluate (5 min): exit slip 	<ul style="list-style-type: none"> ○ Explain: (5 min) discussion from the warm-up leads directly into notes from the Atomic Theory ppt of the atom and the quantum mechanical model (slide 9) ○ Explore (20 min): Do Bohr Model Activity (see worksheet) ○ Evaluate (5 min): exit slip 	<p>complete the worksheet for electron configuration</p> <ul style="list-style-type: none"> ○ Elaborate: electron configuration homework 	<p>taking notes, filling in an "Electron Configuration Tool", watching videos, and performing practice questions. Discuss the Aufbau principle, Hunds rule and Pauli exclusion principle.</p> <ul style="list-style-type: none"> ○ Elaborate (10 min): Do electron configuration activity ○ Evaluate: homework
Assessment	Webquest paper	Exit slip, lab worksheet	Worksheet, quiz	Closing activity	homework
Remarks					

Prepared by:

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