

Grade 10/11/12

Distance Learning Module 3: Week of: April 13 - April 17

Electron Configuration

Content Area: Honors Chemistry - Modified from Unit 6 - Atomic Structure, Electron Configuration & Periodic Relationships

Targeted Goals from Stage 1:

Content Knowledge: Electrons are arranged in energy levels, sublevels, and orbitals. The arrangement of the outermost electrons determines the properties and chemical behaviors of the element. Electron configurations describe how electrons space themselves apart from one another and from the nucleus of an atom. Electron configurations explain the properties of elements.

Vocabulary: wave, wavelength, frequency, photon, quantum, atomic emission spectrum, electron configuration, principal energy level, sublevel, orbital, periods, groups, valence electrons, ionization energy, atomic radius, and electronegativity

Skills: Identify electron configuration of a given element, from its position on the periodic table.

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone at end of the week)
<p>Monday: <i>Students can set their own pacing, but make sure to meet the weekly expectations shown below:</i></p> <ul style="list-style-type: none">● Watch Edpuzzle Video on Quantum Mechanical Model● Watch Edpuzzle Video on Quantum Numbers● Watch Edpuzzle Video on Part 1_Quantum Numbers● Complete Summarizing Notes to organize new Information	<p>DL Objectives_Module 3_Unit 6 Objectives_Electron Configurations (Sections 7.5-7.9)</p> <p>Edpuzzle - Mod3_Video1_Quantum Mechanical Model</p> <p>Edpuzzle - Mod3_Video2_Quantum Mechanical Model</p> <p>Edpuzzle - Mod3_Video3_Part 1_Quantum Numbers</p> <p>Summarizing Notes_Quantum</p>	<p>Submit ONE or MORE of the following to Google Classroom each day:</p> <ul style="list-style-type: none"><input type="checkbox"/> pictures of your notes from Edpuzzle Videos or Unit 6 Electron Configuration Powerpoint<input type="checkbox"/> answer embedded multiple choice while watching edpuzzle videos<input type="checkbox"/> picture of or electronically submitted completed Summarizing Notes (you may need to watch Tuesday's videos to complete)

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone at end of the week)
	Numbers_Electron Configuration	
<p>Tuesday:</p> <ul style="list-style-type: none"> ● Watch Edpuzzle Video on Part 2_Quantum Numbers ● Watch Edpuzzle Video on Writing Electron Configurations ● OPTIONAL: Watch Edpuzzle Extension Video Electron Configurations (Bozeman Science) ● Complete Electron Configuration POGIL 	<p>Edpuzzle - Mod3_Video4_Part 2_Atomic Orbitals and Electron Configurations</p> <p>Edpuzzle - Mod3_Video5_Writing Electron Configurations</p> <p>OPTIONAL VIDEO: Edpuzzle - Mod3_Extension Video_Electron Configuration (Bozeman Science)</p> <p>13 Electron Configuration POGIL.pdf</p>	<p>Submit ONE or MORE of the following to Google Classroom:</p> <ul style="list-style-type: none"> <input type="checkbox"/> pictures of your notes from Edpuzzle Videos or Unit 6 Electron Configuration Powerpoint <input type="checkbox"/> picture of completed Electron Configuration POGIL
<p>Wednesday:</p> <ul style="list-style-type: none"> ● Read through Unit 6 PowerPoint Slide Show & take notes ● Rewatch any previous Edpuzzle Videos ● Complete Wkst 7-3 Quantum Numbers Practice ● Complete Worksheet 7-2 Electron Configuration Problems 	<p>DL_Module 3_Unit 6_Electron Configurations (Sections 7.5-7.9)</p> <p>WKT 7-3 QUANTUM_NUMBERS_WORKSHEET</p> <p>WKST 7-2 Electron Configuration Problems</p>	<p>Submit ONE or MORE of the following to Google Classroom:</p> <ul style="list-style-type: none"> <input type="checkbox"/> pictures of your notes from Edpuzzle Videos or Unit 6 Electron Configuration Powerpoint <input type="checkbox"/> picture of or electronically submitted completed practice Wkst 7-2 Electron Configurations Problems <input type="checkbox"/> picture of or electronically submitted completed practice Wkst 7-3 Quantum Numbers Practice
<p>Thursday:</p> <ul style="list-style-type: none"> ● Watch Edpuzzle Video on Electron Configuration of Ions ● Watch 2 Edpuzzle Videos on Paramagnetism & Diamagnetism ● Complete Practice: Making 	<p>Edpuzzle - Mod3_Video6_Electron configuration of Ions</p> <p>Edpuzzle - Mod3_Video7_Paramagnetism and Diamagnetism</p>	<p>Submit ONE or MORE of the following to Google Classroom:</p> <ul style="list-style-type: none"> <input type="checkbox"/> answer embedded multiple choice while watching edpuzzle videos <input type="checkbox"/> pictures of your notes from Edpuzzle Videos or Unit 6 Electron

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone at end of the week)
Predictions_Paramagnetic or Diamagnetic (Wkst 7-4)	Edpuzzle - Mod3_Video8_Diamagnetism and Paramagnetism WKST 7-4 Paramagnetic or Diamagnetic_	Configuration Powerpoint <input type="checkbox"/> picture of or electronically submitted completed practice Wkst 7-4 Paramagnetic or Diamagnetic Summarizing Notes document (You may need to consult PowerPoint to complete)
Friday: <ul style="list-style-type: none">Complete pages 1-4 of Distance Learning Practice Test for Electron Configuration	Distance Learning Practice Test_Electron Configuration.pdf	Submit ONE or MORE of the following to Google Classroom: <input type="checkbox"/> picture of completed pages 1-4 Distance Learning Practice Test

Week criteria for success (attach student checklists or rubrics): By the end of this week, students should have:

- watched Edpuzzle videos and responded to embedded video questions where appropriate
- taken notes on EdPuzzle videos **OR** Unit 6 Chapter 7_Electron Configurations PowerPoint Slide Show (Sections 7.5-7.9)
- completed Summarizing Notes_Quantum Numbers_Electron Configurations
- completed Electron Configuration POGIL
- completed practice Wkst 7-2 Electron Configurations Problems
- completed practice Wkst 7-3 Quantum Numbers Practice
- completed Making Predictions Paramagnetic or Diamagnetic (Wkst 7-4)
- completed pages 1-4 of Distance Learning Practice Test for Electron Configuration

Supportive resources and tutorials for the week (plans for re-teaching):

- online virtual Q and A help sessions (see Google Classroom for times and invite codes)
- read and re-read the textbook
- watch and rewatch Edpuzzle videos
- practice worksheets and corresponding answer keys in Google Classroom