

Grade 10/11/12

Distance Learning Module 4: Week of: April 20 - April 24

Electron Configuration

Science 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 upload snapshots from a cell phone)
Monday: <i>Students can set their own pacing, but make sure to meet the weekly expectations shown below:</i> <ul style="list-style-type: none">• Watch Edpuzzle Video on Quantum Mechanical Model & take notes• Watch Edpuzzle Video on Quantum Numbers & take notes• Watch Edpuzzle Video on Part 1_Quantum Numbers• Complete Summarizing Notes to organize new Information	DL Objectives_Unit 6 Objectives_Electron Configurations (Sections 7.5-7.9) Edpuzzle - Mod3_Video1_Quantum Mechanical Model Edpuzzle - Mod3_Video2_Quantum Mechanical Model Edpuzzle - Mod4A_Video1_Part 1_Quantum Numbers	<ul style="list-style-type: none"><input type="checkbox"/> answer embedded multiple choice while watching edpuzzle videos - grade will automatically transfer to Classroom gradebook from Edpuzzle when video is watched all the way to the end & show results button is checked<input type="checkbox"/> picture of or electronically submitted completed Summarizing Notes (you

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or upload snapshots from a cell phone)
<ul style="list-style-type: none"> Save notes to submit when you have completed the module 	Summarizing Notes_Quantum Numbers_Electron Configuration	may need to watch Tuesday's videos to complete)
<p>Tuesday:</p> <ul style="list-style-type: none"> Watch Edpuzzle Video on Part 2_Quantum Numbers & take notes Watch Edpuzzle Video on Writing Electron Configurations & take notes Save notes to submit when you have completed the module 	<p>Edpuzzle - Mod3_Video4_Part 2_Atomic Orbitals and Electron Configuratio</p> <p>Edpuzzle - Mod3_Video5_Writing Electron Configurations</p> <p>WKT 7-3 QUANTUM_NUMBERS_WORKSHEET</p> <p>Key_WKT 7-3 Quantum Numbers Worksheet</p>	<ul style="list-style-type: none"> <input type="checkbox"/> view & answer embedded multiple choice while watching edpuzzle videos - grade will automatically transfer to Classroom gradebook from Edpuzzle when video is watched all the way to the end & show results button is checked <input type="checkbox"/> picture of or electronically submitted completed practice Wkst 7-3 Quantum Numbers Practice
<p>Wednesday:</p> <ul style="list-style-type: none"> Watch Edpuzzle Extension Video Electron Configurations (Bozeman Science) & take notes Complete Electron Configuration POGIL Save notes to submit when you have completed the module 	<p>Edpuzzle - Mod3_Extension Video_Electron Configuration</p> <p>13 Electron Configuration POGIL.pdf</p> <p>Key_13 Electron Configuration POGIL</p>	<ul style="list-style-type: none"> <input type="checkbox"/> view & answer embedded multiple choice while watching edpuzzle videos - grade will automatically transfer to Classroom gradebook from Edpuzzle when video is watched all the way to the end & show results button is checked <input type="checkbox"/> picture of completed Electron Configuration POGIL
<p>Thursday:</p> <ul style="list-style-type: none"> Review Edpuzzle videos for the week Complete Worksheet 7-2 Electron Configuration Problems 	<p>WKST 7-2 Electron Configuration Problems</p> <p>Key_Wkst 7-2 Electron Configuration Problems</p>	<ul style="list-style-type: none"> <input type="checkbox"/> picture of or electronically submitted completed practice Wkst 7-2 Electron Configuration Practice

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or upload snapshots from a cell phone)
Friday: <ul style="list-style-type: none"> Complete Google Form Weekly Content Check for Quantum Number / Introductory Electron Configuration Concepts 	Google Form Quantum Number / Introductory Electron Configuration Content Check	<ul style="list-style-type: none"> <input type="checkbox"/> completed Distance Learning Google Form <input type="checkbox"/> Submit notes on Edpuzzle videos

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 weekly EdPuzzle videos and submitted notes to Google classroom
- ☐ completed Summarizing Notes_Quantum Numbers_Electron Configurations
- ☐ completed Electron Configuration POGIL
- ☐ completed practice Wkst 7-3 Quantum Numbers Practice
- ☐ completed practice Wkst 7-2 Electron Configurations Problems
- ☐ Google Form Quantum Number / Introductory Electron Configuration Content Check

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