# WEEK OF October 28th-Nov. 1, 2024

| COURSE: 8th Grade ADV & GEN Science | TEACHER: Turner | PERIODS: 1, 2, 3, 4, 6 |
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| | OBJECTIVES | ACTIVITIES | MATERIALS | HOMEWORK | ASSESSMENT | STANDARDS |
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| MON | Utilize the Periodic Table to construct a Lewis Structure (Electron Dot Diagram) to show an atom's valence electrons.<br><br>Determine if an atom is neutral or electrically charged.<br><br>Describe how an ion is formed.<br><br>Differentiate between cations and anions. | **GEN BR:** Valence Electron questions<br>**ADV BR:** Lewis Structure questions<br>**Students will:**<br>**GEN:** Begin Periodic Table Basics Project.<br>**ADV:** Discuss Unit 3 Notes; watch video What is an Ion? - Tyler DeWitt; label periodic table with oxidation numbers; complete Is it an Ion?; watch video Intro to Ionic Bonding - Tyler D.. | Periodic Table Basics Project<br>E3/A+ Unit 3 Notes<br>What is an Ion? - Tyler DeWitt video<br>Is it an Ion?<br>Intro to Ionic Bonding - Tyler DeWitt video | Finish any unfinished classwork<br><br>**GEN & ADV:**<br>**Study Element Symbol Flashcards**<br>**Periodic Table Project Due Wednesday**<br><br>**ADV: Periodic Table Basics Project due Wednesday** | Participation | ACOS:<br><br>1. Analyze patterns within the periodic table to construct models that illustrate the structure composition and characteristics of atoms and simple and complex molecules<br><br>2. Plan and carry out investigations to generate evidence supporting the claim that one pure substance can be distinguished from another based on characteristic properties |
| TUES | Utilize the Periodic Table to construct a Lewis Structure (Electron Dot Diagram) to show an atom's valence electrons.<br><br>Utilize Lewis structures to show ionic bonding.<br><br>Write ionic formulas and name ionic compounds. | **GEN BR**: Groups/Families questions<br>**ADV BR:** Ion questions<br>**Students will:**<br>**GEN:** Continue working on Periodic Table Basics Project.<br>**ADV:** Watch Ionic Bonding Part 2 video - Tyler DeWitt; draw Lewis Structures to show electron transfer; complete Bonding Basics - Ionic Bonding; discuss naming rules for Ionic Compounds; complete | Periodic Table Basics Project<br>Ionic Bonding Part 2 video - Tyler DeWitt<br>Bonding Basics - Ionic Bonds<br>Criss-Cross Method Notes | Finish any unfinished classwork<br><br>**GEN & ADV:**<br>**Study Element Symbol Flashcards**<br><br>**ADV: Periodic Table Basics Project due Wednesday** | Participation; project | ACOS:<br><br>1. Analyze patterns within the periodic table to construct models that illustrate the structure composition and characteristics of atoms and simple and complex molecules<br><br>2. Plan and carry out investigations to generate evidence supporting the claim that one pure substance can be distinguished from another based on characteristic properties |

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| | | Criss-Cross method notes for writing formulas. | | | | |
| WED | .Determine if an atom is neutral or electrically charged.<br><br>Describe how an ion is formed.<br><br>Differentiate between cations and anions.<br>Utilize Lewis structures to show ionic bonding.<br><br>Write ionic formulas and name ionic compounds.<br><br>Utilize the criss-cross method to write ionic formulas.<br><br>Name ionic compounds based on their formula. | **GEN BR:** Valence electron questions<br>**ADV BR:** Lewis Structure questions<br>**Students will:**<br>**GEN:** Watch video What is an Ion?; label periodic table with oxidation numbers; complete Is it an Ion? Worksheet<br>**ADV:** Complete Checkpoint 3.1; discuss polyatomic ions; make flashcards for polyatomic ions; watch Ionic Bonding Part 3 video - Tyler DeWitt; discuss properties of ionic compounds; watch video Alkali Metals in Water; complete Writing Ionic Formulas & Naming Compounds sheet. | What is an Ion? Video - Tyler DeWitt<br><br>Is it an Ion? Worksheet<br><br>Ionic Bonding Part 3 video - Tyler DeWitt<br><br>E3/A+ Checkpoint 3.1<br><br>Alkali Metals in Water video<br><br>Writing Ionic Formulas & Naming Compounds worksheet | Finish any unfinished classwork<br><br>**GEN & ADV:**<br>**Study Element Symbol Flashcards**<br><br>**ADV: Periodic Table Basics Project due today** | Participation; checkpoint | ACOS:<br><br>1. Analyze patterns within the periodic table to construct models that illustrate the structure composition and characteristics of atoms and simple and complex molecules<br><br>2. Plan and carry out investigations to generate evidence supporting the claim that one pure substance can be distinguished from another based on characteristic properties |
| THURS | Determine if an atom is neutral or electrically charged.<br><br>Describe how an ion is formed.<br><br>Differentiate between cations and anions.<br><br>Utilize Lewis structures to show ionic bonding.<br><br>Write ionic formulas and name ionic compounds.<br><br>Describe polyatomic ions and their charges. | **GEN BR:** Ion questions<br>**ADV BR:** Ionic Bonding questions<br>**Students will:**<br>**GEN:** Watch Ionic Bonding Introduction video & complete Bonding Basics - Ionic; draw Lewis structures & show electron transfer, review naming rules for ionic compounds.<br>**ADV:** Review | Ionic Bonding Introduction video - Tyler DeWitt<br><br>Bonding Basics Ionic<br><br>Polyatomic Practice sheet<br><br>Bond with a Classmate<br><br>Ionic Bonding Task Cards | Finish any unfinished classwork<br><br>**GEN & ADV:**<br>**Study Element Symbol Flashcards** | Participation | ACOS:<br><br>1. Analyze patterns within the periodic table to construct models that illustrate the structure composition and characteristics of atoms and simple and complex molecules<br><br>2. Plan and carry out investigations to generate evidence supporting the claim that one pure substance can be distinguished from another based on characteristic |

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| | Utilize the criss-cross method to write ionic formulas.<br><br>Name ionic compounds based on their formula. | Ionic Bonding - cations, anions, transfer electrons, writing formulas, naming compounds; complete Bond with a Classmate lab; practice polyatomic formulas & names; complete Ionic Bonding Task cards. | | | | properties |
| F<br>R<br>I | Determine if an atom is neutral or electrically charged.<br><br>Describe how an ion is formed.<br><br>Differentiate between cations and anions.<br><br>Utilize Lewis structures to show ionic bonding.<br><br>Write ionic formulas and name ionic compounds.<br><br>Describe polyatomic ions and their charges.<br><br>Utilize the criss-cross method to write ionic formulas.<br><br>Name ionic compounds based on their formula. | **GEN BR:** Ionic Bonding questions<br>**ADV BR:** Ionic naming questions<br>**Students will:**<br>**GEN:** Watch Ionic Bonding Part 2 & 3 video; discuss properties of ionic compounds; watch video: Alkali Metals in Water; finish Bonding basics practice; complete Writing Ionic Formulas & Naming Compounds worksheet.<br>**ADV:** Watch video: Ionic vs. Molecular; complete Covalent Guided Notes; begin Bonding Basics - Covalent; complete Practice Naming & Writing Covalent Compounds. | Ionic Bonding Part 2 & 3 videos - Tyler DeWitt<br><br>Alkali Metals in Water video<br><br>Bonding Basics - Ionic<br><br>Writing Ionic Formulas & Naming Compounds worksheet<br><br>Tyler DeWitt video - Ionic vs. Molecular<br><br>Covalent Guided Notes<br><br>Bonding Basics - Covalent<br><br>Naming & Writing Covalent Compounds | Finish any unfinished classwork<br><br>**GEN & ADV:**<br>**Study Element Symbol Flashcards** | Participation | ACOS:<br><br>1. Analyze patterns within the periodic table to construct models that illustrate the structure composition and characteristics of atoms and simple and complex molecules<br><br>2. Plan and carry out investigations to generate evidence supporting the claim that one pure substance can be distinguished from another based on characteristic properties |