

Pickens High School Lesson Planning Template

Grade Level: 9		McCo		Teacher/Room: 188 / y		Course(s)/ Period(s): Physical Science / 1,2, 4		Week of: 3/9-14/2015	
Unit Vocabulary: covalent bond, ionic bond, nonpolar molecule, polar molecule, ion, molecule, ion, chemical formula, polyatomic ions, subscript									
Instructional Strategies Used: direct instruction, Focused Learning, note-taking, flexible grouping, graphic organizers, activating prior knowledge, flexible grouping, individual instruction, word splash, technology									
Day 1		Day 2		Day 3		Day 4		Day 5	
Common Core Standard(s): SPS1b. Compare and contrast ionic and covalent bonds in terms of electron movement. SPS2. Students will explore the nature of matter, its classifications, and its system for naming types of matter. b. Predict formulas for stable binary ionic compounds based on balance of charges. c. Use IUPAC nomenclature for transition between chemical names and chemical formulas of -binary ionic compounds (containing representative elements). -binary covalent compounds (i.e. carbon dioxide, carbon tetrachloride).		Common Core Standard(s): SPS1b. Compare and contrast ionic and covalent bonds in terms of electron movement. SPS2. Students will explore the nature of matter, its classifications, and its system for naming types of matter. b. Predict formulas for stable binary ionic compounds based on balance of charges. c. Use IUPAC nomenclature for transition between chemical names and chemical formulas of -binary ionic compounds (containing representative elements). -binary covalent compounds (i.e. carbon dioxide, carbon tetrachloride).		Common Core Standard(s): SPS1b. Compare and contrast ionic and covalent bonds in terms of electron movement. SPS2. Students will explore the nature of matter, its classifications, and its system for naming types of matter. b. Predict formulas for stable binary ionic compounds based on balance of charges. c. Use IUPAC nomenclature for transition between chemical names and chemical formulas of -binary ionic compounds (containing representative elements). -binary covalent compounds (i.e. carbon dioxide, carbon tetrachloride).		Common Core Standard(s): SPS1b. Compare and contrast ionic and covalent bonds in terms of electron movement. SPS2. Students will explore the nature of matter, its classifications, and its system for naming types of matter. b. Predict formulas for stable binary ionic compounds based on balance of charges. c. Use IUPAC nomenclature for transition between chemical names and chemical formulas of -binary ionic compounds (containing representative elements). -binary covalent compounds (i.e. carbon dioxide, carbon tetrachloride).		Common Core Standard(s): SPS1b. Compare and contrast ionic and covalent bonds in terms of electron movement. SPS2. Students will explore the nature of matter, its classifications, and its system for naming types of matter. b. Predict formulas for stable binary ionic compounds based on balance of charges. c. Use IUPAC nomenclature for transition between chemical names and chemical formulas of -binary ionic compounds (containing representative elements). -binary covalent compounds (i.e. carbon dioxide, carbon tetrachloride).	
Essential Question: How are ionic bonds formed and how are the formulas written?		Essential Question: What does IPAC mean and how is it involved with writing chemical formuals?		Essential Question: How are electrons shared to form compounds?		Essential Question: What are the rules for writing chemical formulas and naming chemical compounds?		Essential Question: How are covalent and ionic compounds named and written?	
Mini Lesson: <ul style="list-style-type: none"> Review Rules for writing ionic compounds 		Mini Lesson: <ul style="list-style-type: none"> Youtube http://www.youtube.com/watch?v=BCYrNU-7SfA 		Mini Lesson: <ul style="list-style-type: none"> covalent bonding notes 		Mini Lesson: <ul style="list-style-type: none"> quiz 		Mini Lesson: <ul style="list-style-type: none"> introduce simulations 	
Activating Strategies: <ul style="list-style-type: none"> https://www.youtube.com/watch?v=bK9nMHTLhmk https://www.youtube.com/watch?v=QlFTT-_xLo https://www.youtube.com/watch?v=_w6-4fRQt1Y 		Activating Strategies: <ul style="list-style-type: none"> Word Splash 		Activating Strategies: <ul style="list-style-type: none"> http://www.youtube.com/watch?v=ljvX-RMv_lw 		Activating Strategies: <ul style="list-style-type: none"> Captain Polyatomic 		Activating Strategies: <ul style="list-style-type: none"> demonstration 	
Lesson: <ul style="list-style-type: none"> Computer Lab 230 to do ExploreLearning and Achieve 3000 		Lesson: <ul style="list-style-type: none"> Bond with a Classmate Activity Part 2 Determining Chem Formulas 		Lesson: <ul style="list-style-type: none"> Computer Labs 230 and Media Center to do Covalnet Bonds Explore Learning simulation 		Lesson: <ul style="list-style-type: none"> More Formula Writing/Naming compounds Types of Chemical Reactions 		Lesson: <ul style="list-style-type: none"> Computer Lab for Bonding Internet Activity 	

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	Activity		Foldable	
Resource/Materials: <ul style="list-style-type: none"> computer LCD handouts 	Resource/Materials: <ul style="list-style-type: none"> computer lab handouts 	Resource/Materials: <ul style="list-style-type: none"> computer/LCD handouts 	Resource/Materials: <ul style="list-style-type: none"> handouts computers 	Resource/Materials: <ul style="list-style-type: none"> handouts
Differentiation: Content/Process/Product: <ul style="list-style-type: none"> process-technology Achieve 3000 Grouping Strategy: <ul style="list-style-type: none"> Assessment: <ul style="list-style-type: none"> ticket out the door 	Differentiation: Content/Process/Product: <ul style="list-style-type: none"> process-kinesthetic activity Grouping Strategy: <ul style="list-style-type: none"> flexible grouping, individual instruction for students Assessment: <ul style="list-style-type: none"> worksheet 	Differentiation: Content/Process/Product: <ul style="list-style-type: none"> process-technology Achieve 3000 Grouping Strategy: <ul style="list-style-type: none"> flexible grouping, individual instruction for students Assessment: <ul style="list-style-type: none"> worksheet 	Differentiation: Content/Process/Product: <ul style="list-style-type: none"> Learning Focus Grouping Strategy: <ul style="list-style-type: none"> flexible grouping, individual instruction for students Assessment: <ul style="list-style-type: none"> chemistry folder 	Differentiation: Content/Process/Product: <ul style="list-style-type: none"> process-technology Grouping Strategy: <ul style="list-style-type: none"> flexible grouping, individual instruction for students Assessment: <ul style="list-style-type: none"> quiz
Assessment : Pre-Test: Post-Test: Formative: worksheet Summative: Performance Based:	Assessment : Pre-Test: Post-Test: Formative: worksheet Summative: Performance Based:	Assessment : Pre-Test: Post-Test: Formative: Summative: Performance Based: group poster	Assessment : Pre-Test: Post-Test: Formative: Summative: chemistry folder Performance Based:	Assessment : Pre-Test: Post-Test: Formative: quiz Summative: Performance Based:
Homework: pages 606 and 614	Homework: review notes	Homework: quizlet	Homework: study for quiz	Homework: review notes

Resources and Reflective Notes:
<http://jbjones.iweb.bsu.edu/portfolio/resources/Artifacts-&-Rationales/IonicBondingCardGame.pdf>
http://www.nthurston.k12.wa.us/cms/lib/WA01001371/Centricity/Domain/728/IS%20Chemical%20Bonding_coker.pdf
 ion speed dating activity