



8th Grade Science Resources

Updated for 2009-10

Week	Topics	Grade 8 CALIFORNIA SCIENCE STANDARDS	Resources	Hands-on activities (20-25% of instructional time)	Vocabulary <i>H = Holt only</i> <i>F = FOSS only</i>	Assessments
17	Acids Bases	8.5.d Students know physical processes include freezing and boiling, in which a material changes form with no chemical reaction. ®	Text book – Holt CA Physical Science (2007) <i>Properties of Acids & Bases</i> P. 286-291 <i>pH Scale</i> P. 292-294 <i>Neutralization and Salts</i> P. 295 FOSS Chemical Interactions Resources Student Book <i>None</i>	Text book – Holt CA Physical Science (2007) Quick Lab: <i>Blue to Red – Acid!</i> P. 290 Quick Lab: <i>Neutralization</i> P. 293 Skills Practice Lab: <i>Cabbage Patch Indicators</i> P. 296-297 FOSS: Chemical Interactions Kit <i>None</i>	<ul style="list-style-type: none"> ▪ acid ▪ hydronium ion (H₃O⁺) ▪ hydrogen ion (H⁺) ▪ corrosive ▪ indicator ▪ litmus ▪ base ▪ hydroxide ion (OH⁻) ▪ bitter ▪ slippery ▪ solution ▪ concentration ▪ neutralize ▪ antacid ▪ neutralization reaction ▪ salt ▪ pH ▪ neutral ▪ indicator ▪ pH meter 	Science Notebooks Vocabulary Quizzes Holt Chapter 10 Section Review P. 291, 295 Chapter Review P. 300-301 Holt Chapter 10 Standards Assessment P. 302-303 Data Director/ Site Created Assessments
		8.5.a Students know reactant atoms and molecules interact to form products with different chemical properties.®				
		8.5.e Students know how to determine whether a solution is acidic, basic, or neutral.				
		8.9.a Plan and conduct a scientific investigation to test a hypothesis. ®				
18	Acids Bases	8.9.b Evaluate the accuracy and reproducibility of data. ® ⑩	DiscoveryStreaming Video Clips <i>You must be signed-in to connect to the video resources.</i> Compounds: Electromagnetic Attraction in Molecules <i>includes segments on Acids/ Bases and indicators</i> Elements of Chemistry: Acids, Bases, and Salts has basic and advanced (HS) information	Formative Assessment Probe Activities from Uncovering Student Ideas in Science Vol. 1 – Lemonade P. 55-60		Common Acids sulfuric acid (<i>car battery</i>) nitric acid (<i>fertilizer</i>) hydrochloric acid (<i>digestive liquid in stomach</i>) hydrofluoric acid (<i>for etching glass</i>) citric acid (<i>orange juice</i>) ascorbic acid (<i>vitamin C</i>) acetic acid (<i>vinegar</i>)
		8.9.c Distinguish between variable and controlled parameters in a test. ® ⑩				
		Websites http://chemistry.about.com/od/chemistryhowtoguide/ht/waterwine.htm http://antoinne.frostburg.edu/chem/senese/101/features/water2wine.shtml http://www.miamisci.org/ph/default.html http://sv.berkeley.edu/showcase/flash/juicebar.html http://www.madehow.com/Volume-6/Litmus-Paper.html				
		Turn Water to Wine http://chemistry.about.com/od/chemistryhowtoguide/ht/waterwine.htm Molecular Basis of Indicator Color Changes http://antoinne.frostburg.edu/chem/senese/101/features/water2wine.shtml The pH Factor http://www.miamisci.org/ph/default.html GEMS Alien Juice Bar http://sv.berkeley.edu/showcase/flash/juicebar.html How is Litmus paper made? http://www.madehow.com/Volume-6/Litmus-Paper.html				
					Common Bases sodium hydroxide (<i>soap, oven cleaner, lye</i>) calcium hydroxide (<i>cement</i>) ammonia (<i>window cleaner</i>) magnesium hydroxide (<i>antacids</i>) aluminum hydroxide (<i>antacids</i>) sodium bicarbonate (<i>baking soda</i>)	
					Common Salts sodium chloride (<i>salt</i>) sodium nitrate (<i>food preservation</i>)	