

Solutions

Overview Sheet

Essential Question

How/Why do substances create solutions?

Vocabulary

mixture	homogenous	heterogeneous	solution
solute	solvent	suspension	concentration
saturated	supersaturated	dilute	solubility
acid	base	neutral	pH

Objectives

1. Describe a mixture and the two main types (heterogeneous and homogenous)
2. Identify the parts of a solution (solute & solvent)
3. Explain how the properties of a solution differ from their separate components
4. Explain the importance of concentration as it pertains to a solution
5. Compare and contrast the different factors that influence solubility (temperature, pressure, molecular structure)
6. Describe acids and bases
7. Explain how a pH scale works

Helpful Websites

- http://schoolhouse1.fenn.org/dduane/Science8th/text_chapter_8.htm (mixtures overview)
- <http://www.school-for-champions.com/chemistry/mixtures.htm> (mixtures overview)
- http://www.chem4kids.com/files/matter_solution.html (solutions & mixtures overview)
- <http://www.elmhurst.edu/~chm/vchembook/106Amixture.html> (solutions and mixtures overview)
- <http://www.school-for-champions.com/chemistry/solutions.htm> (solutions overview)
- http://preparatorychemistry.com/Bishop_Neut_frames.htm (solubility + interactive)
- http://preparatorychemistry.com/Bishop_Neut_frames.htm (dissolving + interactive)
- http://preparatorychemistry.com/Bishop_Neut_frames.htm (precipitate + interactive)
- <http://www.fossweb.com/modules3-6/MixturesandSolutions/index.html> (mixtures & solutions + interactive - "Junkyard Analysis")
- <http://www.harcourtschool.com/activity/mixture/mixture.html> (mixtures lab + interactive)

More on back



- <http://scienceview.berkeley.edu/showcase/flash/juicebar.html> (acids & bases overview +interactive)
- http://www.chem4kids.com/files/react_acidbase.html (acids & bases overview)
- http://www.mhhe.com/physsci/chemistry/chang7/esp/folder_structure/cr/m3/s3/index.htm (acids & bases + overview)
- http://www.visionlearning.com/library/module_viewer.php?mid=58 (acids & bases overview)
- <http://www.brainpop.com/science/matter/acidsandbases/preview.weml> (acids & bases + movie)
- http://preparatorychemistry.com/Bishop_Neut_frames.htm (acid/base reactions + interactive)
- http://preparatorychemistry.com/Bishop_Acid_frames.htm (acids + interactive)
- <http://www.school-for-champions.com/chemistry/acids.htm> (acids overview)
- <http://www.school-for-champions.com/chemistry/bases.htm> (bases overview)
- http://www.wwnorton.com/college/chemistry/gilbert/tutorials/interface.asp?chapter=chapter_16&folder=ph_scale (pH scale + tutorial)
- <http://www.miamisci.org/ph/> (pH + interactive)
- <http://www.brainpop.com/science/matter/ph/preview.weml> (pH scale + movie)
- <http://www.harcourtschool.com/activity/acids/> (pH scale + interactive game)
- <http://www.solpass.org/Crosswords/Acids.html> (acids & bases + interactive crossword)
- http://glencoe.mcgraw-hill.com/sites/0078617677/student_view0/chapter3/section1/self-check_quiz-eng_.html (solutions quiz + interactive)
- http://glencoe.mcgraw-hill.com/sites/0078617677/student_view0/chapter3/section2/self-check_quiz-eng_.html (solubility quiz + interactive)
- http://glencoe.mcgraw-hill.com/sites/0078617677/student_view0/chapter3/chapter_review_quizzes-eng_.html (mixtures and solubility quiz + interactive)
- <http://www.teacherbridge.org/public/bhs/teachers/Dana/Matter.html> (mixtures quiz + interactive)
- http://glencoe.mcgraw-hill.com/sites/0078617677/student_view0/chapter3/section3/self-check_quiz-eng_.html (acids & bases quiz + interactive)
- http://gldscienceteachers.tripod.com/junior/quizzes/chem_mixtures.html (mixtures quiz + interactive)
- <http://www.quia.com/jg/431838.html> (acids, bases, mixture + review game)