Activity ideas

Using Assessment to Build Strong Foundations

Concept Development in the Chemical World

Name	Description	Website Addresses and QR codes
Victoria State Education and Training	This website identifies teaching ideas, concept map development, and simple activity ideas to help students understand the difference between melting and dissolving.	https://www.education.vic.gov.au/school/teachers/teachingresources/discipline/science/continuum/Pages/meltdissolve.aspx
Scientific American	This link is to an activity in this US magazine; an idea which could be used to prompt students to design their own investigations into solubility of substances.	https://www.scientificamerican.com/article/solubility-science-how-much-is-too-much/
Royal Society of Chemistry	"Water, sport and solutions" is a teaching resource designed to give students ideas on how to investigate factors that affect the rate of dissolving, with some extension ideas to relate learning to reactions and separating mixtures.	https://edu.rsc.org/resources/water-sports-and-solutions/859.article
SuBATOMIC (Supporting Better Activities To Overcome Misconceptions In Chemistry)	This site associated with UL & NCE-MSTL explains research about the effective teaching of lower-secondary level chemistry with a specific focus on targeting misconceptions in chemistry. The site provides ideas and resources for teaching activities.	http://www.subatomic.ie/topics/water-and-solutions/activities/

Royal Society of Chemistry	"White powder mix up" is a problem-solving activity where students use characteristic properties, including solubility, to identify substances.	https://edu.rsc.org/resources/white-powder-mix-up-at-the-factory/1179.article
PHET Simulation	Watch your solution change colour as you mix chemicals with water. What are all the ways you can change the concentration of your solution? Switch solutes to compare different chemicals and find out how concentrated you can go before you hit saturation.	https://phet.colorado.edu/en/simulation/concentration
PHET Simulation	Add different salts to water, then watch them dissolve. Compare highly soluble NaCl to other slightly soluble salts.	https://phet.colorado.edu/en/simulation/legacy/soluble-salts
JCT Science	Activity to investigate the solubility of carbon dioxide in water at different temperatures. Contains extension information on the ocean as a carbon sink, making the link between the solubility of carbon dioxide and the delicate equilibrium of marine environments.	https://www.jct.ie/perch/resources/science/chem-ed-2018-workshop-resouce-booklet-science.pdf