

AVATAR Postsecondary Science Course Profile Alignment Template

Course: General Chemistry I							
Course Description: the first in a two-course survey of general chemistry concepts that include fundamental concepts, states of matter, periodic table, structure and bonding, stoichiometry, oxidation and reduction, solutions, and compounds of representative elements.							
Enduring Understanding/Essential Question: The Mole Concept							
Key Concepts/Student Learning Outcomes	Texas College and Career Readiness Standards (CCRS) - Science	Texas College and Career Readiness Standards (CCRS) - Math	Texas College and Career Readiness Standards (CCRS) – Cross-Disciplinary	Summative Assessment	Instructional Strategies	Formative Assessment Strategies	Resources
Number of particles	VII G.1a						
Converting particles to mass and vice versa	VII G.1a,						
Definition of mole	VII G.1a						
Factor used in chemical calculations	VII G.2a						
Amu to gram conversions							
Empirical and molecular formulas	VII G.1a						
Stoichiometry (mole-mole, mole-mass, mass-mass)	VII G.2a						
Combustion analysis							
Reactions in solution	VII G.2a						
Neutralization							
Connections between nanoscale and macroscale							
Molarity	VII I.2b						
Molar volume and molar density							
(PV=nRT)							

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