

Unified School District of De Pere Course Overview

Course Name: Chemistry

Link to Standards Booklet [WI Standards for Science](#)

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Unit 1: Lab Safety

Important Concepts/Skills	Standards Addressed (Essential Standards are in bold.)	Page Number (in Standards booklet)
Lab Safety Rules	SCI.SEP3.A.h	23
Lab Equipment Usage	SCI.SEP3.A.h	23

Unit 2: Atomic Structure, Electrons, and Energy

Important Concepts/Skills	Standards Addressed (Essential Standards are in bold.)	Page Number (in Standards booklet)
Structure of the Atom	SCI.PS1.A.h SCI.CC4.h	47 14
Nature of Science - Atomic Theory	SCI.PS1.A.h SCI.SEP1.A.h. SCI.SEP4.A.h SCI.SEP5.A.h SCI.SEP6.A.h	47 19 25 27 29
How Atoms Emit Light	SCI.PS1.A.h SCI.PS4.A.h SCI.PS4.B.h	47 54 54
Describing Electrons in an Atom	SCI.PS1.A.h	47

Unit 3: Periodic Table and Bonding

Important Concepts/Skills	Standards Addressed (Essential Standards are in bold.)	Page Number (in Standards booklet)
Periodic Table and Periodic Trends	SCI.CC1.h SCI.PS1.A.h SCI.SEP5.A.h SCI.SEP6.A.h	11 47 27 29
Covalent and Ionic Bonding	SCI.CC1.h SCI.PS1.A.h SCI.SEP6.A.h	11 47 29

Unit 4: Nomenclature

Important Concepts/Skills	Standards	Page
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	Addressed (Essential Standards are in bold.)	Number (in Standards booklet)
Writing Chemical Formulas	SCI.CC1.h	11
Writing Chemical Names	SCI.CC1.h	11

Unit 5: Chemical Reactions

Important Concepts/Skills	Standards Addressed (Essential Standards are in bold.)	Page Number (in Standards booklet)
Writing formula and word equations	SCI.SEP1.A.h SCI.SEP5.A.h SCI.SEP6.A.h SCI.CC1.h SCI.CC2.h SCI.CC4.h SCI.PS1.B.h	19 27 29 11 12 14 47
Reaction Type Patterns	SCI.SEP1.A.h SCI.SEP5.A.h SCI.SEP6.A.h SCI.CC1.h SCI.CC2.h SCI.CC4.h SCI.PS1.B.h	19 27 29 11 12 14 47

Unit 6: Chemical Quantities

Important Concepts/Skills	Standards Addressed (Essential Standards are in bold.)	Page Number (in Standards booklet)
Using Significant Figures	SCI.CC1.h	11
Mole Concept Calculations	SCI.SEP5.A.h SCI.SEP6.A.h	27 29

Unit 7: Stoichiometry

Important Concepts/Skills	Standards Addressed (Essential Standards are in bold.)	Page Number (in Standards booklet)
Mole Ratios	SCI.CC2.h SCI.SEP4.A.h SCI.SEP5.A.h SCI.SEP6.A.h SCI.CC4.h SCI.CC5.h	12 25 27 29 14 15
Mole-Mass Stoichiometry Problems	SCI.CC2.h SCI.SEP4.A.h SCI.SEP5.A.h SCI.SEP6.A.h SCI.CC4.h SCI.CC5.h	12 25 27 29 14 15
Percent Yield, Percent Error Calculations and Evaluations	SCI.CC2.h SCI.SEP4.A.h SCI.SEP5.A.h SCI.SEP6.A.h SCI.CC4.h SCI.CC5.h	12 25 27 29 14 15

Unit 8: Thermochemistry

Important Concepts/Skills	Standards Addressed (Essential Standards are in bold.)	Page Number (in Standards booklet)
Endothermic and Exothermic Reactions and Phase Changes	SCI.CC2.h SCI.CC7.h SCI.SEP1.A.h SCI.SEP3.A.h SCI.SEP4.A.h SCI.SEP5.A.h SCI.SEP6.A.h	12 17 19 23 25 27 29
Create and Analyze Heating/Cooling Curves	SCI.CC2.h SCI.CC7.h SCI.SEP1.A.h SCI.SEP3.A.h SCI.SEP4.A.h SCI.SEP5.A.h SCI.SEP6.A.h	12 17 19 23 25 27 29