

Unified School District of De Pere Course Overview

Course Name: Physical Science

Link to Standards Booklet: [Wisconsin Science Standards Link](#)

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Unit 1: Science Inquiry

Important Concepts/Skills	Standards Addressed (Essential Standards are in bold.)	Page Number (in Standards booklet)
Lab Safety	Lab Safety Protocol	N/A
Science Inquiry: Claim, Evidence, Reasoning	Cross Cutting Concepts	11-17
Analyzing/Interpreting Graphs	Cross Cutting Concepts	11-17

Unit 2: Properties of Matter

Important Concepts/Skills	Standards Addressed (Essential Standards are in bold.)	Page Number (in Standards booklet)
Measuring skills: units of measurement and science equipment	SCI.CC1: SCI.CC3:	11 13
Measuring, calculating, and using <i>DENSITY</i>	SCI.CC3: SCI.CC6: SCI.SEP4:	13 16 25

Unit 3: States & Phases of Matter

Important Concepts/Skills	Standards Addressed (Essential Standards are in bold.)	Page Number (in Standards booklet)
Explain Kinetic Molecular Theory	SCI.PS1.A	47
Explain how solids, liquids, and gasses behave at a molecular level	SCI.PS1.A	47
Explain transfer of energy during changing phases of matter	SCI.PS1.B	47

Unit 4: Classification of Matter

Important Concepts/Skills	Standards Addressed (Essential Standards are in bold.)	Page Number (in Standards booklet)
Identify patterns of the Periodic Table	SCI.PS1.A	47
Using the Periodic Table to identify parts of the atom	SCI.PS1.A	47
Identify ions and write ionic compounds	SCI.PS1.A	47
Describing Covalent compounds	SCI.PS1.A	47
Classifying mixtures and pure substances	SCI.PS1.A	47

Unit 5: Changes in Matter (Chemical Reactions)

Important Concepts/Skills	Standards Addressed (Essential Standards are in bold.)	Page Number (in Standards booklet)
Understand when matter has changed physically or chemically	SCI.PS1.B	47
Explain what speeds up or slows down a chemical reaction	SCI.PS1.B	47
Explain how chemical reactions represent Law of Conservation of Mass	SCI.PS1.B	47

Unit 6: Motion and Forces

Important Concepts/Skills	Standards Addressed (Essential Standards are in bold.)	Page Number (in Standards booklet)
Describing relative motion	SCI.PS2.A - SCI.PS2.B	50
Graphing and analyzing a moving object	SCI.PS2.A - SCI.PS2.B	50
Describing and calculating acceleration	SCI.PS2.A - SCI.PS2.B	50
Use force diagrams to describe Newton's Laws of Motion	SCI.PS2.A - SCI.PS2.B	50
Explain how friction and gravity affect motion	SCI.PS2.A - SCI.PS2.B	50

Unit 7: Waves, Sound, and Light

Important Concepts/Skills	Standards Addressed (Essential Standards are in bold.)	Page Number (in Standards booklet)
Identifying types of waves	SCI.PS4.A - SCI.PS4.C	54
Identifying properties of all waves	SCI.PS4.A - SCI.PS4.C	54
Using the electromagnetic spectrum	SCI.PS4.A - SCI.PS4.C	54
Researching and applying wave technology in our lives	SCI.PS4.A - SCI.PS4.C	54

Unit 8: Energy

Important Concepts/Skills	Standards Addressed (Essential Standards are in bold.)	Page Number (in Standards booklet)
Mechanical Energy: Define and calculating	SCI.PS3.A:	52
Conservation of Energy: Explain using examples and math concepts	SCI.PS3.B:	52
Nuclear Energy: What is Nuclear energy, where do we use it, and should we use it.	SCI.SEP7.A: SCI.SEP8.A: SCI.PS1.C:	31 33 52

Unit 9: Electricity

Important Concepts/Skills	Standards Addressed (Essential Standards are in bold.)	Page Number (in Standards booklet)
Define electricity and what factors influence it	SCI.PS1.A - SCI.PS1.D	52
Explain how circuitry controls the overall flow of electricity	SCI.PS1.A - SCI.PS1.D	52
Using electricity safely: transformers & circuit breakers	SCI.PS1.A - SCI.PS1.D	52

Unit 10: Rocket Science

Important Concepts/Skills	Standards Addressed (Essential Standards are in bold.)	Page Number (in Standards booklet)
Rocket construction	SCI.CC4: SCI.SEP6.B:	14 30
Transferring energy to launch	SCI.PS3.B:	52
Transferring energy during flight	SCI.PS3.B:	52
Newton's laws of motion	SCI.PS2.A: SCI.PS3.C:	50 52