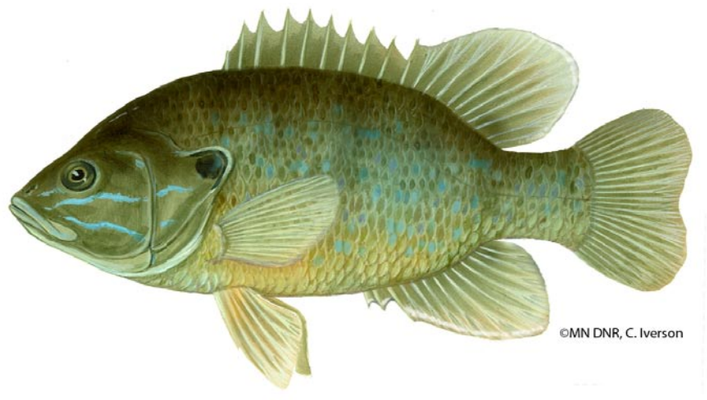
Please note: Academic Standards are updated regularly and our alignments will be updated on the DNR Academic Standards Website at: www.mndnr.gov/education/teachers/edstandards_intro.html

Minnesota Academic Standards Correlations

The lessons in the *Fishing: Get in the Habitat! MinnAqua Leader's Guide* have been developed from a comprehensive environmental systems perspective and are multidisciplinary and cross-curricular in nature. Many lessons cover a wide spectrum of topics.

All lessons are correlated to the Minnesota Academic Standards to illustrate the level to which each lesson addresses the learning Benchmarks within the Standards. Please note that the lessons in the *MinnAqua Leader's Guide* have not been developed to specifically meet the U.S. National Education Standards or the Minnesota Academic Standards. Specific requirements outlined within the Minnesota Academic Standards remain the responsibility of each instructor. We strongly encourage instructors to modify lessons from the *MinnAqua Leader's Guide* as they see fit. And although assessment suggestions and guidelines appear in each lesson, the instructor must still assess the students' work.



Addressing Benchmarks with Lessons in the *MinnAqua Leader's Guide*

Each lesson in the *MinnAqua Leader's Guide* lists Minnesota Academic Benchmarks addressed within that lesson.

This correlation represents the Minnesota DNR MinnAqua Program's interpretation of the Minnesota Academic Standards and their relation to the *MinnAqua Leader's Guide.*

◒ **Lesson *introduces* this Benchmark.**
In the Minnesota Academic Standards Matrix, this symbol ◒ signifies that the lesson introduces some of the concepts and/or the language in the related Benchmark. By providing more specific emphasis and information, the instructor can expand on these concepts within the lesson, or in conjunction with another lesson, to address the Benchmark more fully.

◒ **Lesson *partially* addresses this Benchmark.**
This symbol ◒ signifies that the lesson partially addresses the concepts, if not in the exact terms and/or language used in the Benchmark. By providing more specific emphasis and information, the instructor can expand on these concepts within the lesson or in conjunction with another lesson, to address the Benchmark more fully.

● **Lesson *fully* addresses this Benchmark.**
This symbol ● signifies that the lesson fully addresses the concepts and language used in the Benchmark.

The MinnAqua Program sincerely hopes that you'll find these correlations useful as you incorporate the *Fishing: Get in the Habitat! MinnAqua Leader's Guide* into your curriculum.

Minnesota Academic Standards Correlations

Minnesota Science Standards: Third Grade

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

				Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship							Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills							Chapter 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
Strand	Substrand	Standard	Benchmark																																							
I. HISTORY AND NATURE OF SCIENCE	A. Scientific World View	The student will understand the use of science as a tool to examine the natural world.	1. The student will explore the use of science as a tool that can help investigate and answer questions about the environment.				◍		◍		◍	◒	◍	◒						◒	◒	◍		◒			◍	◍							◒			◍				
	B. Scientific Inquiry	The student will understand the nature of scientific investigations.	1. The student will ask questions about the natural world that can be investigated scientifically.						◍		◒			◍								◍						◍										◍			
			2. The student will participate in a scientific investigation using appropriate tools.				◍		◍		◍									◍	◍	◍					◍	◍										◍			
			3. The student will know that scientists use different kinds of investigations depending on the questions they are trying to answer.								◒									◍		◍					◍	◍										◍			
II. PHYSICAL SCIENCE	C. Energy Transformation	The student will explore the characteristics and properties of sound and light.	2. The student will know that light tends to maintain its direction of motion until it is absorbed, refracted, or reflected by an object.																														◍							
III. EARTH AND SPACE SCIENCE	B. The Water Cycle, Weather and Climate	The student will investigate weather conditions.	1. The student will measure, record, and describe weather conditions using common instruments.						◒																			◒							◒	◒	◒			
	C. The Universe	The student will understand the characteristics and relationships of objects in the solar system.	3. The student will observe that the sun supplies heat and light to the earth.		◍				●								●		◍								◍							●							
IV. LIFE SCIENCE	B. Diversity of Organisms	The student will recognize that plants and animals have different structures that serve various functions.	1. The student will describe the structures that serve different functions in growth, survival and reproduction for plants and animals.						◒	◒	◒						◒			◍			◍	●										◒	◍				●		
			2. The student will know that plants have different structures from animals that serve the same necessary functions in growth, survival and reproduction.						●											●																					
	C. Interdependence of Life	The student will understand that an organism's patterns of behavior are related to the nature of its environment.	1. The student will know that organisms interact with one another in various ways besides providing food.	◍		●		◍		◒										◍				●					◒												
			2. The student will know that changes in a habitat can be beneficial or harmful to an organism.		◍	●		◍	●								◍			◍	◍		◍	◍	●	◍	◍	◍		◒										●
	D. Heredity	The student will understand that many characteristics of an organism are inherited from its parents, but that other characteristics result from an individual's interactions with the environment.	2. The student will identify similarities and differences between parent and offspring.																															◍						

Minnesota Academic Standards Correlations

Minnesota Science Standards: Fourth Grade

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

				Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship						Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills								Chapter 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
Strand	Substrand	Standard	Benchmark																																						
I. HISTORY AND NATURE OF SCIENCE	A. Scientific World View	The student will understand how science is used to investigate interactions between people and the natural world.	1. The student will explore the uses and effects of science in our interaction with the natural world.									◒	◍	●							◍	◍		◒				●	●	●	◒	◍	●	●			◒	◒	◒			
			2. The student will discuss the responsible use of science.																		◍		●						●	●	◒	◒	●	◒			◒	◒	◒			
			3. The student will recognize the impact of scientific and technological activities on the natural world.			●															◍		●						●	●	◒	◍	●	◒			◒	◒	◒			
	B. Scientific Inquiry	The student will participate in a controlled scientific investigation.	1. The student will recognize when comparisons might not be fair because some conditions are not kept the same.						●																	●															
			2. The student will collect, organize, analyze and present data from a controlled experiment.						●		●									●		◍					●	●														
			3. The student will recognize that evidence and logic are necessary to support scientific understandings.						●		◒			◍						●		◍					●	●												◍		
II. PHYSICAL SCIENCE	A. Structure of Matter	The student will know that heating and cooling may cause changes to the properties of a substance.	1. The student will observe that heating and cooling can cause changes in state.					◍	◒								◒		◍																						
			2. The student will describe the changes in the properties of a substance when it is heated or cooled.														◒		◍								●														
III. EARTH AND SPACE SCIENCE	A. Earth Structure and Processes	The student will investigate the impact humans have on the environment.	1. The student will identify and investigate environmental issues and potential solutions.			●										◒				●	●		●		●	●	●	●	●	●			◒							●	
	B. The Water Cycle, Weather and Climate	The student will recognize that water on Earth cycles and exists in many forms.	1. The student will describe the water cycle involving the processes of evaporation, condensation, precipitation and collection.																◍		◍	◍																			
			2. The student will identify where water exists on earth.																◍		◍	◍																			
IV. LIFE SCIENCE	A. Cells	The student will know that all organisms are composed of cells, which are the fundamental units of life.	1. The student will recognize that cells are very small, and that all living things consist of one or more cells.						●																															
			2. The student will recognize that cells need: food, water and air, a way to dispose of waste, and an environment in which they can live.						●																															
	B. Diversity of Organisms	The student will know that living things can be sorted into groups in many ways according to their varied characteristics, structure and behaviors.	1. The student will classify plants and animals according to their physical characteristics.				●					●	●	●						●				●																
			2. The student will learn that the characteristics used for grouping depend on the purpose of the grouping.				●					●	●	●						●				●																
	G. Human Organism	The student will know the structures that serve various functions in the human body, including protection from disease.	1. The student will understand that humans have structures that serve functions in growth, survival and reproduction.							◒																														

Minnesota Academic Standards Correlations

Minnesota Science Standards: Fifth Grade

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

				Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship							Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills								Chapter 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
	Substrand	Standard	Benchmark																																							
I. HISTORY AND NATURE OF SCIENCE	A. Scientific World View	The student will understand that communication is essential to science.	1. The student will know that current scientific knowledge and understanding guide scientific investigation.																					◍																	
			2. The student will recognize that clear communication of methods, findings and critical review is an essential part of doing science.						◍		◍	◍		◍																											
	B. Scientific Inquiry	The student will understand the process of scientific investigations.	1. The student will perform a controlled experiment using a specific step-by-step procedure and present conclusions supported by the evidence.				◍		◍		◍			◍						◍		◍					◍	◍											◒		
			2. The student will observe that when a science investigation or experiment is repeated, a similar result is expected.						◍		◍									◍		◍					◍	◍											◒		
	C. Scientific Enterprise	The student will recognize that science and technology involve different kinds of work and engage men and women of all backgrounds.	1. The student will describe different kinds of work done in science and technology.				◒					◍	◒										◍			◍	◍	◒	◍											
III. EARTH AND SPACE SCIENCE	A. Earth Structure and Processes	The student will explore the structures and functions of earth systems.	3. The student will describe how waves, wind, water and ice shape and reshape the earth's surface.					◍												◒		◍																		
			5. The student will explore the interaction of the lithosphere, atmosphere, biosphere, hydrosphere and space.					◍												◍																				
IV. LIFE SCIENCE	E. Biological Populations Change Over Time	The student will know that biological populations change over time.	1. The student will recognize that individuals of the same species differ in their characteristics and that sometimes the differences give individuals an advantage in surviving and reproducing.								◍					◍																							
			2. The student will recognize that extinction of a species occurs when the environment changes and the adaptive characteristics of a species are insufficient to allow its survival.																					●																
	F. Flow of Matter and Energy	The student will know that matter and energy flow into, out of, and within a biological system.	1. The student will recognize that organisms need to stay alive and grow, and that this energy originates from the sun.		◍	◍														◍					●															
			2. The student will use food webs to describe the relationships among producers, consumers, and decomposers in an ecosystem.		◍	◍																		●									◍						◒	
			3. The student will recognize that organisms are growing, dying and decaying, and that their matter is recycled		◍																			●																

Minnesota Academic Standards Correlations

Minnesota History and Social Studies Standards K - 3rd Grade

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

				Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship						Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills								Chapter 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
Strand	Substrand	Standard	Benchmark																																							
I. U.S. HISTORY	A. Family Life Today and in the Past	The student will understand how families live today and in earlier times, recognizing that some aspects change over time while others stay the same.	1. Students will compare family life in his or her community from earlier times and today.													◍																										
	C. Many Peoples and Cultures Meet in the Making of North America	The student will demonstrate knowledge of the people who settled in North America.	1. Students will understand that large and diverse American Indian nations were the original inhabitants of North America.													◍																										
III. WORLD HISTORY	A. Family Life Today and in the Past	The student will understand how families live today and in earlier times, recognizing that some aspects change over time while others stay the same.	1. Students will compare family life in their own communities from earlier times and today.							◒						◍																										
			3. Students will compare technologies from earlier times and today, and identify the impact of invention on historical change.																																						
IV. HISTORICAL SKILLS	A. Concepts of Time	The student will demonstrate chronological thinking.	1. Students will define and use the terms for concepts of historical time.			◒			◍								◍		◒					◒		◒																
	B. Historical Resources	The student will understand that we can learn about the past from different sorts of evidence.	1. Students will compare different kinds of historical sources and describe the different sorts of information the sources provide.													◍																										
V. GEOGRAPHY	A. Concept of Location	The student will use directional and positional words to locate and describe people, places and things.	2. Students will use maps and globes to locate places referenced in stories and real life situations.					◒													◒																		◒			
			4. Students will name and use directional words to describe locations of places in the school and community. Students will locate places by using simple maps, and understand that maps are drawings of locations and places as viewed from above.					◒													◍																		◒			
	B. Maps and Globes	The student will use and create maps and globes to locate people, places and things.	1. Students will locate places by using simple maps, and understand that maps are drawings of locations and places from above.					◒													◒																		◍			
	C. Physical Features and Processes	The student will identify specific landforms and waterways on a map using geographical terms.	2. Students will explain and use introductory geographical terms.																		◒																					

continued

Minnesota Academic Standards Correlations

Minnesota History and Social Studies Standards K - 3rd Grade (*continued*)

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

				Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship							Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills							Chapter 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
Strand	Substrand	Standard	Benchmark																																							
VI. ECONOMICS	A. Economic Choices	The student will understand that economic choices are necessary in life.	1. Students will identify the difference between basic needs (food, clothing, and shelter) and wants (things people would like to have).																										●												
			3. Students will understand and explain that the concept of scarcity means that one cannot have all the goods and services that one wants.																										●				●								
			4. Students will give examples of tradeoffs (opportunity costs).																				●																		
	B. Producers and Consumers	The student will understand the relationship between consumers and producers in regard to goods and services.	1. Students will distinguish between producers and consumers and between goods and services.																							◒															
			2. Students will recognize and explain that natural resources, human resources, and human-made resources are used in the production of goods and services.																				●																		
VII. GOVERNMENT AND CITIZENSHIP	A. Civic Values, Skills, Rights and Responsibilities	The student will describe civic values, rights and responsibilities in a republic.	1. Students will demonstrate knowledge of civic values that facilitate thoughtful and effective participation in civic life.																							◒			◒	◒										◒		
			2. Students will explain the rights and responsibilities of people living in a democracy, including the principle of majority rule and minority rights.																										◍												
		The student will understand the importance of participation in civic life and demonstrate effective civic skills.	1. Students will explain the importance of participation and cooperation in a classroom and community and explain how people can make a difference in others' lives.																																						
			2. Students will describe how they can influence school rules by studying and discussing issues and presenting their concerns to the people in authority.																																						
			4. Students will explain that people have diverse viewpoints and that speaking and listening to others is important.																										◍												
	B. Beliefs and Principles of United States Democracy	The student will understand the role of government, rules, and law and why we have them.	1. Students will give examples of rules in the classroom/school and community, provide reasons for the specific rules, and know the characteristics of good rules.																				◒			◍				◒									◍	◍		
			2. Students will explain that rules and laws apply to everyone and describe consequences for breaking rules or laws.																				◒			◍				●									◍	◍		
		The student will know key symbols, songs and locations that represent our nation and state.	2. Students will recognize symbols that are significant for the state of Minnesota. (The walleye is the state fish)									◒		◒																											
	D. Governmental Institutions and Processes of the United States.	The student will know basic functions of government.	1. Students will describe examples of specific services provided by government.																							◍	◍		◍	◒												

Minnesota Academic Standards Correlations

Minnesota History and Social Studies Standards 4th - 8th Grade

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

				Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship							Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills								Chapter 6: Safety & the Fishing Trip				
Strand	Substrand	Standard	Benchmark	1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
I. U.S. HIS-	A. Pre-history through 1607	The student will understand that American Indians were the original inhabitants of North America.	1. Students will compare ways of life of Indian Nations from different regions of North America.													◒																										
II. MINNESOTA HISTORY	A. Pre-Contact to 1650	The student will demonstrate knowledge of Minnesota's indigenous peoples.	2. Students will explain the major historical aspects of Dakota and Ojibwe culture, social organization and history, and compare and contrast them.													◍																										
	G. Post-World War II to the present	The student will know and understand Minnesota's role in the major social, economic and political changes, both national and international, in the last half of the 20th century through the present, and analyze the impact of those changes.	4. Students will identify and describe significant land use changes in Minnesota, issues related to land use, and analyze the impact of those changes and issues.			◒													◍	◍		◍		◒					●														
IV. HISTORICAL SKILLS	B. Historical Resources	The student will begin to use historical resources.	1. Students will identify, describe, and extract information from various types of historical sources, both primary and secondary.													◒																										●
			3. Students will investigate the ways historians learn about the past if there are no written records.													◒																										
V. GEOGRAPHY	C. Physical Features and Processes	The student will use basic terminology describing basic physical and cultural features of continents studied.	2. Students will describe and locate major physical features in their local community and analyze their impact on the community.																	◒		◍																				
	D. Interconnections	The student will give examples that demonstrate how people are connected to each other and the environment.	2. Students will analyze own the physical environment influences human activities.													◒				◍		◍			◒	◒			◒	◍	◍	◒	◒	◒	◒	◒	◒	◒	◒	◒	◒	◒		
		The student will describe how humans influence the environment and in turn are influenced by it.	1. Students will recognize changes over time in nearby landscapes, resulting from human occupation.			●													◍	◍		●		◒																		
	E. Essential Skills	The student will use maps, globes, geographic information systems and other sources of information to analyze the natures of places at a variety of scales.	1. Students will demonstrate the ability to obtain geographic information from a variety of print and electronic sources.																																				◍		
			2. Students will make inferences and draw conclusions about the character of places based on analyses and comparison of maps, aerial photos and other images.																																				●		

continued

Minnesota Academic Standards Correlations

Minnesota History and Social Studies Standards 4th - 8th Grade (*continued*)

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
◍ Lesson *fully* addresses this Benchmark.

				Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship							Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills							Chapter 6: Safety & the Fishing Trip					
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
Strand	Substrand	Standard	Benchmark																																							
VI. ECONOMICS	A. Producers and Consumers	The student will understand the concept of interdependence in relation to producers and consumers.	2. Students will explain that in market economies, individuals earn income by working for firms to produce goods and services, and firms incur costs by hiring individuals and earn revenue by selling goods and services.																				◒					◒														
	B. Economic Choices	The student will understand basic principles of economic decision-making.	2. Students will apply a decision-making process to make informed choices.																				◍			◒		◍	◍														
	C. The Market Economy (Micro Economics)	The student will understand business organizations, market structures, and financial institutions that operate within our economy.	1. Students will identify and compare and contrast various industries and the occupations related to them.																				◒				◒		◒														
VII. GOVERNMENT AND CITIZENSHIP	A. Civic Values, Skills, Rights and Responsibilities	The student will articulate the range of rights and responsibilities in a republic.	2. Students will explain some of the responsibilities of people living in a democracy.																									◍														
	A. Civic Values, Skills, Rights and Responsibilities	The student will understand the importance of participation in civic life and demonstrate effective civic skills.	1. Students will explain the steps necessary to become an informed voter and engaged citizen.																									◒														
			2. Students will explain the meaning of civic life and how all members of a community can be engaged.																						◍			◒														
			3. Students will identify and research community problems and recommend solutions.																						◍			◍														
	B. Beliefs and Principles of United States Democracy	The student will explain the importance of law in the American constitutional system.	1. Students will explain how law limits both the government and the governed, protects individual rights and promotes the general welfare.																						◍																	
	D. Governmental Institutions and Processes of the United States	The student will know the functions of Minnesota state and local governments and describe their relationship with the federal government.	3. Students will understand the basic structure and functions of state and local governments.																																							

Minnesota Academic Standards Correlations

Minnesota Language Arts Standards 3rd Grade

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

Strand	Substrand	Standard	Benchmark	Ch 1: Aquatic Habitats						Ch 2: Minnesota Fish									Ch 3: Water Stewardship							Ch 4: Fish Management					Ch 5: Fishing Equipment & Skills								Ch 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
I. READING AND LITERATURE - The student will read and understand grade-appropriate English language text.	A. Word Recognition, Analysis and Fluency	The student will apply word recognition strategies to decode unfamiliar multi-syllabic words and will read grade-appropriate text with accuracy and fluency.	1. The student will read unfamiliar, complex, and multi-syllabic words using advanced phonetic and structural analysis.				◒									●																										
			2. The student will read aloud narrative and expository text with fluency, accuracy, and appropriate pacing, intonation and expression.																										●												
	B. Vocabulary Expansion		1. The student will acquire, understand and use new vocabulary through explicit instruction and independent reading.	●	●	●	◒	◒	◍		◍	●	●		◍	●	●		◍	◍	◍	◍		●	●	●	◍	●	◍	●	◒	◍	◍	●	●	◍	●	◍	●		●		●		●
			3. The student will use context and word structure to determine the meaning of unfamiliar words.		●	●																																					
	C. Comprehension	The student will understand the meaning of texts using a variety of comprehension strategies and will demonstrate literal, interpretive and evaluative comprehension.	1. The student will read aloud grade-appropriate text (that has not been previewed) with accuracy and comprehension.				◒	◍																		●																
			2. The student will recall and use prior learning and preview text, using title, headings and illustrations, to prepare for reading.				◒									●																										
			3. The student will generate and answer literal, inferential, interpretive and evaluative questions to demonstrate understanding about what is read.													●							◒		●																	
			4. The student will retell, restate or summarize information orally, in writing, and through graphic organizers.							●						●																										
			7. The student will follow three-step written directions.				●																	◒		●		●														
	D. Literature	The student will actively engage in the reading process and read, understand, respond to, analyze, interpret, evaluate and appreciate a wide variety of fiction, poetic and nonfiction texts.	1. The student will read from and listen to American literature, as well as literature from other countries.													●																										
			2. The student will identify, describe and respond to literary elements of characterization, plot, setting and theme.													●																										
			4. The student will compare and contrast similar works by different authors in the same genre of the same theme.													●																										
			6. The student will identify and determine the meanings of similes and metaphors.													●																										
			7. The student will critically read, and examine text to determine author's purpose.													●																										
			8. The student will respond to literature using ideas and details from the text to support reactions and make literary connections.													●																										
			9. The student will read from and respond to a variety of fiction, poetic and nonfiction texts of increasing complexity for personal enjoyment.													◒																										

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Minnesota Academic Standards Correlations

Minnesota Language Arts Standards 3rd Grade *(continued)*

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

Strand	Substrand	Standard	Benchmark	1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
II. WRITING - (Writing should be addressed across content areas and integrated into the curriculum.) The student will write clearly and coherently to communicate effectively for a variety of audiences and purposes.	A. Types of Writing	The student will compose various pieces of writing.	1. The student will write in a variety of modes to express meaning, including: a. descriptive b. narrative c. informative d. friendly letter e. poetic								●				●	●								●														●				
	B. Elements of Composition	The student will engage in a writing process, with attention to organization, focus and quality of ideas.	1. The student will write a paragraph that includes: a. an indented or block style of paragraph b. a topic sentence c. 3-5 supporting sentences d. a concluding sentence (implied in lessons with writing activities)																																						
			2. The student will use composing processes, including: prewriting, drafting, revising, editing and publishing													●																									
			3. The student will use verbalization (discussions, interviews, brainstorming) to prepare for writing.													●																									
	C. Spelling, Grammar and Usage	The student will apply standard English conventions when writing. (Use of standard English conventions is necessary to help a writer convey meaning to the reader. Spelling, grammar, and usage may be taught as a separate unit as well as integrated into teaching writing processes.)	1. The student will compose complete sentences when writing.													●		◍							◍																	
			2. The student will recognize and correct spelling errors when writing.													◒																									
			5. Apply grammar conventions correctly in writing, including: a. nouns b. verbs c. adjectives d. pronouns.													◍											◍														
			6. Apply punctuation conventions correctly in writing, including: a. periods, question marks, exclamation points b. capitalization of proper nouns c. abbreviations d. sentence beginnings e. commas in a series.													◍											◍														
	D. Research	The student will locate and use information in reference materials.	1. The student will use grade-level appropriate reference materials to obtain information from dictionaries, glossaries, encyclopedias, and the Internet.				◍									◍								◍	◍		◍												◍			
	E. Handwriting and Word Processing	The student will write legibly.	1. The student will write legibly, allowing margins and correct spacing between letters in a word and words in a sentence.													◍																									
			3. The student will begin acquiring keyboarding skills.													◍																									

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Minnesota Academic Standards Correlations

Minnesota Language Arts Standards 3rd Grade *(continued)*

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

Strand	Substrand	Standard	Benchmark	Ch 1: Aquatic Habitats						Ch 2: Minnesota Fish									Ch 3: Water Stewardship							Ch 4: Fish Management					Ch 5: Fishing Equipment & Skills									Ch 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. The student will participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.	●	●	●		●	◍	●	●		◍	●	●	●	●	●			●	◍			●	●		●	●	◍							●		●	●			
			2. The student will demonstrate active listening and comprehension.	●	●	●		●	◍	●	●		◍	●	●	●	●	●	●	●				●	●	●			●	◍	●	◍	●	●		◍	●	●	●	●	●		
			3. The student will follow multi-step oral directions.	●	●	●			◍						◍	●				●				●							●	◍	◍		●		◍	●	●				
			4. The student will give oral presentations to different audiences for different purposes.						◍					◍	◍	●				●				◒		◍								●	●			●		◍			
			5. The student will organize and express ideas sequentially or according to major points.			●	●	●						◍		●																		●									
			6. The student will perform expressive oral readings of prose, poetry or drama.													●										●											●					
	B. Media Literacy	The student will critically analyze information found in electronic and print media, and will use a variety of these sources to learn about a topic and represent ideas.	1. The student will read, print and view pictures and video images and identify differences in how information is presented in print and non-print materials.				●																																		
			2. The student will use print, pictures, audio and video to express ideas and knowledge gleaned from the sources.				●																																		

Minnesota Academic Standards Correlations

Minnesota Language Arts Standards 4th Grade

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

				Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship							Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills								Chapter 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
	Substrand	Standard	Benchmark																																							
I. READING AND LITERATURE - The student will read and understand grade-appropriate English language text.	A. Word Recognition, Analysis and Fluency	The student will decode unfamiliar words using phonetic and structural analysis and will read with fluency and expressions.	1. The student will read unfamiliar complex and multi-syllabic words using advanced phonetic and structural analysis in grade appropriate text.				◒																																		
			2. The student will read aloud narrative and expository text with fluency, accuracy, and appropriate pacing, intonation and expression.													●													●												
	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. The student will acquire, understand and use new vocabulary through explicit instruction and independent reading.	◍	◍	◍	◒	◒		◍	◍	◍	◍		◍	●	◍		◍	◍	◍	◍		◍	◍	◍	◍	◍		◍	◒	◍	◍	◍	◍	◍	◍	◍		◍		◍	
	C. Comprehension	The student will understand the meaning of texts, using a variety of strategies and will demonstrate literal, interpretive and evaluative comprehension.	1. The student will read aloud grade-appropriate text (that has not been previewed) with accuracy and comprehension.				◒	◍																		◍															
			2. The student will recall and use prior learning and preview text to prepare for reading.				◒									●																								
			3. The student will generate and answer literal, inferential, interpretive and evaluative questions to demonstrate understanding about what is read.													●							◒		◍													◍			
			4. The student will summarize and paraphrase what is read.																					◍																	
			6. The students will distinguish fact from opinion, determine cause and effect, and draw conclusions.					◍								●																								
			9. The student will follow multi-step written instructions.				◍																			◍		◍												
			10. The student will compare and contrast information on the same topic from two sources.													●																								
	D. Literature	The student will actively engage in the reading process and read, understand, respond to, analyze, interpret, evaluate and appreciate a wide variety of fiction, poetic and nonfiction texts.	1. The student will read and respond to a variety of high quality, traditional, classical and contemporary literary works specific to America as well as significant works from other countries.													◍																								
			2. The student will identify, respond to, and compare and contrast the literary elements of characterization, plot, setting and theme.													●																								
			4. The student will compare and evaluate similar works by different authors in the same genre or theme.													●																								
			7. The student will identify and determine the meanings of similes and metaphors.													●																								
			8. The student will critically read, and examine text to determine author's purpose and point of view.													●																								
			9. The student will respond to literature using ideas and details from the text to support reactions and make literary connections.													●																								

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Minnesota Academic Standards Correlations

Minnesota Language Arts Standards 4th Grade *(continued)*

◒ Lesson *introduces* this Benchmark.
◉ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

				Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship						Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills								Chapter 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
	Substrand	Standard	Benchmark																																							
II. WRITING - (Writing should be addressed across content areas and integrated into the curriculum.) The student will write clearly and coherently to communicate effectively for a variety of audiences and purposes.	A. Types of Writing	The student will compose various pieces of writing.	1. The student will write in a variety of styles to express meaning, including a. descriptive b. narrative c. informative d. friendly letter e. poetic f. persuasive g. thank you note								●					●							●															●				
	B. Elements of Composition	The student will engage in a writing process, with attention to organization, focus and quality of ideas.	1. The student will write topic sentences.																						◉																	
			2. The student will write a paragraph that includes: a. correct paragraph indentation style b. an introductory paragraph formulating a thesis c. supporting evidence that upholds an overall thesis d. a concluding sentence as a summary (implied in lessons with writing activities)																																							
			3. The student will use composing processes, including: prewriting, drafting, revising, editing and publishing.													●																										
			4. The student will create informative reports, including gathering material, formulating ideas based on gathered material, organizing information, and editing for logical progression.			◉																			◉																	
			5. The student will use verbalization (discussions, interviews, brainstorming) to prepare for writing.													●									◉																	
			6. The student will consider audience in composing texts.													●																										
	B. Spelling, Grammar and Usage	The student will apply standard English conventions when writing. (Use of standard English conventions is necessary to help a writer convey meaning to the reader. Spelling, grammar, and usage may be taught as a separate unit as well as integrated into teaching writing processes.)	1. The student will compose complete sentences when writing.													●	●																										
			4. Apply grammar conventions correctly in writing, including: a. nouns b. verbs c. adjectives d. pronouns													●																										
			5. Apply punctuation conventions correctly in writing, including: a. periods, question marks, exclamation points b. capitalization of proper nouns c. abbreviations d. sentence beginnings e. commas in a series													●																										
	D. Research	The student will locate and use information in reference materials.	1. The student will locate information in various reference materials including dictionaries, online dictionaries, glossaries, encyclopedias, and the Internet.				◒									●								◉	●														●				
	E. Handwriting and Word Processing	The student will write legibly and use a keyboard.	2. The student will apply basic keyboarding skills.													●																										

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Minnesota Academic Standards Correlations

Minnesota Language Arts Standards 4th Grade *(continued)*

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

				Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship									Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills							Chapter 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
	Substrand	Standard	Benchmark																																								
III. SPEAKING, LISTENING AND VIEWING - The student will speak clearly and effectively for a variety of purposes and audiences and actively listen to, view and evaluate oral com-	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. The student will participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.	●	●	●		●	◍	●	●		●	●	●	●	●	●			◍	◍				●		●	●	◍				●				●		●	●		
			2. The student will demonstrate active listening and comprehension.	●	●	●		●	◍	●	●		●	●	●	●	●	●	●	●				●	●				●	◍	●	◍	●	●		●	●	●	●			
			3. The student will give oral presentations to different audiences for different purposes.						◍					●	◍	●				◍				◒	●					●			◍	●				●		●			
			4. The student will organize and summarize ideas, using evidence to support opinions or main ideas.						◍					●																								●					
			5. The student will perform expressive oral readings of prose, poetry or drama.													●										●												●					
	B. Media Literacy	The student will critically analyze information found in electronic and print media, and will use a variety of these sources to learn about a topic and represent ideas.	1. The student will read print, view pictures and video images and listen to audio files and identify distinctions in how information is presented in print and non-print materials.				●																																		
			3. The student will use print, pictures, audio and video to express ideas and knowledge gleaned from these sources.				●																																		

Minnesota Academic Standards Correlations

Minnesota Language Arts Standards 5th Grade

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

	Substrand	Standard	Benchmark	Ch 1: Aquatic Habitats						Ch 2: Minnesota Fish									Ch 3: Water Stewardship							Ch 4: Fish Management					Ch 5: Fishing Equipment & Skills							Ch 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
I. READING AND LITERATURE - The student will read and understand grade-appropriate English language text.	A. Word Recognition, Analysis, and Fluency	The student will decode unfamiliar words using phonetic and structural analysis and will read with fluency and expression.	1. The student will read unfamiliar, complex and multi-syllabic words using advanced phonetic and structural analysis.				◒																																		
			2. The student will read aloud narrative and expository text with fluency, accuracy, and appropriate pacing, intonation and expression.													●																									
	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. The student will acquire, understand and use new vocabulary through explicit instruction as well as independent reading.	●	●	●	◍	◍		●	●	●	●		●	●	●		●	●	●	●		●	●	●	●	●			◒	●	●	●	●	●	●	●		●		●	
			4. The student will analyze word structure and use context clues in order to understand new words.				◒																																		
	C. Comprehension	The student will understand the meaning of tests using a variety of strategies and will demonstrate literal, interpretive, inferential and evaluative comprehension.	1. The student will read aloud grade-appropriate text (that has not been previewed) with accuracy and comprehension.				◒	◍																		●																
			2. The student will recall and use prior learning and preview text to prepare for reading.													●																									
			4. The student will identify main ideas and supporting details in fiction text.													●																									
			6. The student will generate graphic organizers to enhance comprehension of texts and to describe text structure and organization.																																				●		
			7. The student will generate and answer literal, inferential, interpretive and evaluative questions to demonstrate understanding about what is read.													●							◒		●														●		
			8. The student will distinguish fact from opinion and provide evidence to support conclusions.													◒																									
			9. The student will determine cause and effect and draw conclusions.					●																																	
			11. The student will critically read and evaluate text to identify the author's point of view and purpose.													●																									
			13. The student will follow multiple-step written directions.				●																			●		●													
	D. Literature	The student will actively engage in the reading process and read, understand, respond to, analyze, interpret, evaluate and appreciate a wide variety of fiction, poetic and nonfiction texts.	1. The student will read a variety of high quality, traditional, classical and contemporary literary works specific to America, as well as significant works from other countries.				◒									●																									
			2. The student will identify and analyze literary elements and devices in works of fiction including characterization, plot, tone and theme and the ways they convey meaning.													●																									
			4. The student will interpret literature by answering questions that ask for analysis and evaluation.													●																									
			5. The student will distinguish among various literary genres and subgenres.													●																									
			7. The student will identify and determine the meanings of similes and metaphors.													●																									
			8. The student will respond to literature using ideas and details from the text to support and make literary connections.													●																									

(continued)

Minnesota Academic Standards Correlations

Minnesota Language Arts Standards 5th Grade *(continued)*

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

				Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship							Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills								Chapter 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
	Substrand	Standard	Benchmark																																							
II. WRITING - (Writing should be addressed across content areas and integrated into the curriculum.) The student will write clearly and coherently to communicate effectively for a variety of audiences and purposes.	A. Types of Writing	The student will compose various pieces of writing.	1. The student will write in a variety of modes to express meaning, including: a. descriptive b. narrative c. informative d. friendly letter e. poetry f. persuasive g. thank you notes h. reports								●				●	●							●															●				
	B. Elements of Composition	The student will engage in a writing process, with attention to organization, focus and quality of ideas, audience and a purpose.	2. The student will create multiple paragraph compositions that include: a. an indented or block style of paragraph b. a topic sentence c. 3-5 supporting sentences d. a concluding sentence (implied in lessons with writing activities)																																						
			3. The student will use composing processes, including: prewriting, drafting, revising, editing and publishing.													●																										
			4. The student will create informative reports, including gathering material, formulating ideas based on gathered material, organizing information, and editing for logical progression.																																						
			5. The student will consider the intended audience when composing text.																																						
	C. Spelling, Grammar and Usage	The student will apply standard English conventions when writing. (Use of standard English conventions is necessary to help a writer convey meaning to the reader. Spelling, grammar, and usage may be taught as a separate unit as well as integrated into teaching writing processes.)	1. The student will compose complete sentences when writing.													●	◍							◍																		
			2. The student will edit written documents for correct spelling.													●																										
			4. The student will apply grammar conventions correctly in writing, including: a. verb tense b. prepositional phrases c. adverbs d. subject and verb agreement with simple subjects e. possessive pronouns and plural possessives													◍								◍																		
			5. The student will apply punctuation conventions correctly in writing, including: a. apostrophes b. capitalization of proper nouns c. abbreviations d. sentence beginnings e. commas f. quotation marks													◍								◍																		
	D. Research	The student will locate and use information in reference materials.	1. The student will locate and keep notes on the information in various reference materials including print and online dictionaries, glossaries, encyclopedias, CD reference materials and the Internet.													◍								◍															◍			
			2. The student will formulate research questions and collect relevant information or perform observations that address such questions.																	◒																						
	E. Handwriting and Word Processing	The student will write legibly and demonstrate effective keyboarding skills.	2. The student will apply keyboarding skills.													◍																										

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Minnesota Academic Standards Correlations

Minnesota Language Arts Standards 5th Grade *(continued)*

◒ Lesson *introduces* this Benchmark.
◉ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

	Substrand	Standard	Benchmark	Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship						Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills							Chapter 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
III. SPEAKING, LISTENING AND VIEWING - The student will speak clearly and effectively for a variety of purposes and audiences and actively listen to, view and evaluate oral communication and media.	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. The student will participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.	●	●	●		●	●	●	●		●	●	●	●	●	●			●	●				●		●	●	●		●			●			●	●		●	
			2. The student will demonstrate active listening and comprehension.	●	●	●		●	●	●	●		●	●	●	●	●	●	●	◒			●	●			●		●		●	◒	●	●			●	●	●			
			4. The student will give oral presentations to different audiences for different purposes.					●					◉	◉							●			◒		●							●	●			●		◉			
			5. The student will restate or summarize and organize ideas sequentially, using evidence to support opinions and main ideas.					●					◉																													
			6. The student will perform expressive oral readings of prose, poetry or drama.												●											◉												●				

Minnesota Academic Standards Correlations

Minnesota Math Standards 3rd Grade

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

				Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship							Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills								Chapter 6: Safety & the Fishing Trip					
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
Strand	Substrand	Standard	Benchmark																																							
I. MATHEMATICAL REASONING		Apply skills of mathematical representation, communication and reasoning throughout the remaining four content standards. Note about assessment of this standard: The Mathematical Reasoning standards will primarily be assessed within the context of the standards in the remaining four content strands. The depth of mathematical reasoning will increase as the skill level in the four other strands increases.	1. The student will communicate, reason and represent situations mathematically.						◒							◍										◍	●																
			2. The student will solve problems by distinguishing relevant from irrelevant information, sequencing and prioritizing information and breaking multi-step problems into simpler parts.																								◍	◒														
			3. The student will evaluate the reasonableness of the solution by considering appropriate estimates and the context of the original problem.													◒											◍															
			4. The student will know when it is appropriate to estimate and when an exact answer with whole numbers, fractions or decimals is needed.																								◍															
			5. The student will express a written problem in suitable mathematical language, solve the problem and interpret the result in the original context.																								◍															
			6. The student will support mathematical results using pictures, numbers and words to explain why the steps in a solution are valid and why a particular solution method is appropriate.																								◍															
II. NUMBER SENSE, COMPUTATION AND OPERATIONS	A. Number Sense	Represent whole numbers in various ways to quantify information and to solve real-world and mathematical problems. Understand the concept of decimals and common fractions.	1. The student will read, write with numerals, compare and order whole numbers to 9.999.														◍																◒									
			2. The student will represent up to 4-digit whole numbers in various ways maintaining equivalence, such as 3206 = (32 x 100) + 6 or 3206 = 3200 + 6																																							
			3. The student will know how fractions are related to the whole, such as four-fourths equal a whole or three fourths equal three of four equal parts of a whole.																		◒																					
			4. The student will represent and write fractions with pictures, models and numbers.																		◒																					
	B. Computation and Operation	Compute fluently and make reasonable estimates with whole numbers in real-world and mathematical problems. Understand addition and subtraction and how they relate to one another. Understand the concepts of multiplication and division.	1. The student will use addition of up to three whole number addends, containing up to four digits each in real-world and mathematical problems.																																◍			◒			
			2. The student will use subtraction with up to three digit whole numbers in real-world and mathematical problems.														◍																									
			4. Demonstrate mastery of basic addition facts for addends 0 through 9, without a calculator.																																			◒			
			6. The student will demonstrate an understanding of the multiplication facts through 10 using concrete models.														◍*										◍															

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Minnesota Academic Standards Correlations

Minnesota Math Standards 3rd Grade *(continued)*

◒ Lesson *introduces* this Benchmark.
◉ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

				Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship							Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills								Chapter 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
Strand	Substrand	Standard	Benchmark																																							
IV. DATA ANALYSIS, STATISTICS AND PROB-	A. Data and Statistics	Represent and interpret data in real-world and mathematical problems.	1. The student will read and interpret data from circle graphs using halves, thirds and quarters.																									◉													
			2. The student will collect data using observations or surveys and represent the data with pictographs and line plots with appropriate title and key.						●								●									◉																
V. SPATIAL SENSE, GEOM- ETRY AND MEASURE-	C. Measurement	Measure and calculate length, time, weight, temperature and money using appropriate tools and units to solve real-world and mathematical problems.	1. The student will select an appropriate tool and identify the appropriate unit to measure time, length, weight and						●												◒	◒							◒												
			4. The student will tell time to the minute using digital and analog time.																									◉													
			5. The student will determine elapsed time to the minute.																									◉													
			6. The student will make change using as few coins as possible up to a dollar.																																◒						

Minnesota Academic Standards Correlations

Minnesota Math Standards 3rd Grade

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

				Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship							Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills								Chapter 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
Strand	Substrand	Standard	Benchmark																																							
I. MATHEMATICAL REASONING		Apply skills of mathematical representation, communication and reasoning throughout the remaining four content standards. Note about assessment of this standard: The Mathematical Reasoning standards will primarily be assessed within the context of the standards in the remaining four content strands. The depth of mathematical reasoning will increase as the skill level in the four other strands increases.	1. The student will communicate, reason and represent situations mathematically.						◒								◍									◍	●															
			2. The student will solve problems by distinguishing relevant from irrelevant information, sequencing and prioritizing information and breaking multi-step problems into simpler parts.																								◍	◒														
			3. The student will evaluate the reasonableness of the solution by considering appropriate estimates and the context of the original problem.														◒									◍															
			4. The student will know when it is appropriate to estimate and when an exact answer with whole numbers, fractions or decimals is needed.																								◍															
			5. The student will express a written problem in suitable mathematical language, solve the problem and interpret the result in the original context.																								◍															
			6. The student will support mathematical results using pictures, numbers and words to explain why the steps in a solution are valid and why a particular solution method is appropriate.																								◍															
II. NUMBER SENSE, COMPUTATION AND OPERATIONS	A. Number Sense	Represent whole numbers in various ways to quantify information and to solve real-world and mathematical problems. Understand the concept of decimals and common fractions.	1. The student will read and write whole numbers to 100,000, in numerals and words.																																							
	B. Computation and Operation	Compute fluently and make reasonable estimates with whole numbers in real-world and mathematical problems. Understand the meanings of arithmetic operations and how they relate to one another.	1. The student will use addition and subtraction of multi-digit whole numbers to solve multi-step real-world and mathematical problems.															◒														◒				◒					
			2. The student will add up to three whole numbers containing up to three digits each, without a calculator.															◍																							
			4. The student will demonstrate mastery of multiplication facts for the numbers 0-10, without a calculator.																																	◒					

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Minnesota Academic Standards Correlations

Minnesota Math Standards 3rd Grade *(continued)*

◒ Lesson *introduces* this Benchmark.
◒ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

				Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship							Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills								Chapter 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
Strand	Substrand	Standard	Benchmark																																							
III. PATTERNS, FUNCTIONS AND ALGEBRA	A. Patterns and Functions	Understand and describe patterns in tables and graphs.	1. The student will examine and describe patterns in tables and graphs.														●																									
IV. DATA ANALYSIS, STATISTICS AND PROBABILITY	A. Data and Statistics	Represent and interpret data in real-world and mathematical problems.	1. The student will collect data using observations or surveys and represent the data with tables and graphs with labeling.						●								●										●	●													
			2. The student will use mathematical language to describe a set of data.						●								●										●	●													
V. SPATIAL SENSE, GEOMETRY AND MEASUREMENT	C. Measurement	Measure and calculate length and area using appropriate tools and units to solve real-world and mathematical problems. Make change with money.	3. The student will make change using as few coins and bills as possible up to $20.																														●								

Minnesota Academic Standards Correlations

Minnesota Math Standards 4th Grade

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

Strand	Substrand	Standard	Benchmark	1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
I. MATHEMATICAL REASONING		Apply skills of mathematical representation, communication and reasoning throughout the remaining four content standards. Note about assessment of this standard: The Mathematical Reasoning standards will primarily be assessed within the context of the standards in the remaining four content strands. The depth of mathematical reasoning will increase as the skill level in the four other strands increases.	1. The student will communicate, reason and represent situations mathematically.						◒								◍										◍	◍															
			2. The student will solve problems by distinguishing relevant from irrelevant information, sequencing and prioritizing information and breaking multi-step problems into simpler parts.																								◍	◒															
			3. The student will evaluate the reasonableness of the solution by considering appropriate estimates and the context of the original problem.														◒										◍																
			4. The student will know when it is appropriate to estimate and when an exact answer with whole numbers, fractions or decimals is needed.																								◍																
			5. The student will express a written problem in suitable mathematical language, solve the problem and interpret the result in the original context.																								◍																
			6. The student will support mathematical results using pictures, numbers and words to explain why the steps in a solution are valid and why a particular solution method is appropriate.																								◍																
II. NUMBER SENSE, COMPUTATION AND OPERATIONS	A. Number Sense	Represent whole numbers in various ways to quantify information and to solve real-world and mathematical problems. Understand the concept of decimals and common fractions.	1. The student will read and write whole numbers to 100,000, in numerals and words.																																								
	B. Computation and Operation	Compute fluently and make reasonable estimates with whole numbers in real-world and mathematical problems. Understand the meanings of arithmetic operations and how they relate to one another.	1. The student will use addition and subtraction of multi-digit whole numbers to solve multi-step real-world and mathematical problems.														◒																	◒				◒				
			2. The student will add up to three whole numbers containing up to three digits each, without a calculator.														◍																										
			4. The student will demonstrate mastery of multiplication facts for the numbers 0-10, without a calculator.																																		◒					

Minnesota Academic Standards Correlations

Minnesota Math Standards 4th Grade

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

				Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship							Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills								Chapter 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
Strand	Substrand	Standard	Benchmark																																							
III. PATTERNS, FUNCTIONS AND ALGEBRA	A. Patterns and Functions	Understand and describe patterns in tables and graphs.	1. The student will examine and describe patterns in tables and graphs.														●																									
IV. DATA ANALYSIS, STATISTICS AND PROBABILITY	A. Data and Statistics	Represent and interpret data in real-world and mathematical problems.	1. The student will collect data using observations or surveys and represent the data with tables and graphs with labeling.						●								●										●	●													
			2. The student will use mathematical language to describe a set of data.						●								●										●	●													
V. SPATIAL SENSE, GEOMETRY AND MEASUREMENT	C. Measurement	Measure and calcualte length and area using appropriate tools and units to solve real-world and mathematical problems. Make change with money.	3. The student will make change using as few coins and bills as possible up to $20.																														◍								

Minnesota Academic Standards Correlations

Minnesota Math Standards 5th Grade

◒ Lesson *introduces* this Benchmark.
◍ Lesson *partially* addresses this Benchmark.
● Lesson *fully* addresses this Benchmark.

Strand	Substrand	Standard	Benchmark	Ch 1: Aquatic Habitats						Ch 2: Minnesota Fish									Ch 3: Water Stewardship							Ch 4: Fish Management					Ch 5: Fishing Equipment & Skills								Ch 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
I. MATHEMATICAL REASONING		Apply skills of mathematical representation, communication and reasoning throughout the remaining four content standards. Note about assessment of this standard: The Mathematical Reasoning standards will primarily be assessed within the context of the standards in the remaining four content strands. The depth of mathematical reasoning will increase as the skill level in the four other strands increases.	1. The student will communicate, reason and represent situations mathematically.						◒								◍								◍	●																
			2. The student will solve problems by distinguishing relevant from irrelevant information, sequencing and prioritizing information and breaking multi-step problems into simpler parts.																							◍	◒															
			3. The student will evaluate the reasonableness of the solution by considering appropriate estimates and the context of the original problem.														◒									◍																
			4. The student will know when it is appropriate to estimate and when an exact answer with whole numbers, fractions or decimals is needed.																							◍																
			5. The student will express a written problem in suitable mathematical language, solve the problem and interpret the result in the original context.																							◍																
			6. The student will support mathematical results using pictures, numbers and words to explain why the steps in a solution are valid and why a particular solution method is appropriate.																							◍																
			7. The student will organize, record and communicate math ideas coherently and clearly.														◍																									

(continued)

Minnesota Academic Standards Correlations

Minnesota Math Standards 5th Grade *(continued)*

◒ Lesson *introduces* this Benchmark.
◒ Lesson *partially* addresses this Benchmark.
◒ Lesson *fully* addresses this Benchmark.

				Chapter 1: Aquatic Habitats						Chapter 2: Minnesota Fish									Chapter 3: Water Stewardship							Chapter 4: Fish Management					Chapter 5: Fishing Equipment & Skills								Chapter 6: Safety & the Fishing Trip				
				1. Design a Habitat	2. Food Chain Tag	3. Run For Your Life Cycle	4. Water Habitat Site Study	5. Habitat Hideout	6. From Frozen to Fascinating	1. Fish Sense	2. Fins: Form & Function	3. Fish Families	4. Using a Key for Fish ID	5. Diving Into Diversity	6. Adapted for Habitat	7. Fish Tales	8. Fish in Winter	9. Fish Bowl	1. The Incredible Journey	2. Function of Aquatic Plants	3. Wonderful Watersheds	4. Would You Drink This Water?	5. The Lake Game	6. Macroinvertebrate Mayhem	7. Mussel Mania	1. Fishing Regulations & Sportsmanship	2. Fish Surveys	3. Aquatic Plant Power	4. Town Meeting	5. Fisheries Management & You	1. Freshwater Rods & Reels	2. Casting a Closed-face Rod & Reel	3. Pop Can Casting	4. Tackling Your Tackle Box	5. Flashy Fish Catchers	6. Fool Fish With Flies	7. Making Ice Fishing Jiggle Sticks	1. Safety & Fishing at the Water's Edge	2. Ice Fishing & Winter Safety	3. Planning a Fishing Trip	4. Piscatorial Palate	5. Eating Fish
Strand	Substrand	Standard	Benchmark																																							
II. NUMBER SENSE, COMPUTATIONS AND OPERATIONS	A. Number Sense	Represent fractions, decimals and whole numbers in a variety of ways, to quantify information and to solve real-world and mathematical problems. Understand the concept of negative numbers.	4. The student will use a variety of estimation strategies such as rounding, truncation, over-and underestimation and decide when an estimated solution is appropriate.																							◒																
	B. Computation and Operation	Compute fluently and make reasonable estimates with fractions, decimals, and whole numbers, in real-world and mathematical problems. Understand the meanings of arithmetic operations and how they relate to one another.	1. The student will use addition, subtraction, multiplication and division of nulti-digit whole numbers to solve multi-step, real-world and mathematical problems.																							◒									◒						
			2. Add and subtact numbers with up to two decimal places in real-world or mathematical problems.																														◒								
			4. The student will multiply, without a calculator, a two-digit whole number or decimal by a two-digit whole number or decimal, such as 3.2 x 3.4																							◒										◒					
			5. The student will multiply, without a calculator, a three-digit whole number of decimal by a one-digit whole number or decimal such as 3.51 divided by 3.																							◒															
III. PATTERNS, FUNCTIONS	A. Patterns and Functions	Understand and describe patterns in numbers, shapes, tables and graphs.	1. The student will identify patterns in numbers, shapes, tables and graphs and explain how to extend those patterns.													◒																										
	B. Algebra (Algebraic Thinking)	Prepresent mathematical relationships using equations.	1. The student will evaluate numeric expressions in real-world and mathematical problems.																							◒															
IV. DATA ANALYSIS, STATISTICS AND PROB-	A. Data and Statistics	Represent data and use various measures associated with data to draw conclusions.	1. The student will determine whether or not a given graph matches a given data set.													◒																										
			2. The student will use fractions and percentages to compare data sets.																							◒															
			3. The student will collect data using measurements, surveys or experiments and represent the data with tables and graphs with labeling.					◒								◒										◒	◒															
			4. The student will find mean, mode, median, and range of a data set.																							◒															