



# Alignment of Eagle Bluff's Environmental Science Classes for grades 4-12 with MN Academic Standards



Science Standards



Mathematics Standards



Language Arts Standards

Grade Level	Strand	Sub-Strand	Standard	Benchmarks
-------------	--------	------------	----------	------------

## Amphibians

GRADE 4	IV. LIFE SCIENCE	B. Diversity of Organisms	The student will know that living things can be sorted into groups in many ways according to their varied characteristics, structures and behaviors.	1. The student will classify plants and animals according to their physical characteristics.
GRADE 4	V. SPATIAL SENSE, GEOMETRY & MEASUREMENT	B. Geometry	Use attributes of two- and three-dimensional shapes to identify them and distinguish between them.	1. Identify, describe, and classify two- and three-dimensional shapes by their attributes.
GRADE 4	I. READING AND LITERATURE	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. Read unfamiliar complex and multi-syllabic words using advanced phonetic and structural analysis in grade-appropriate text.
GRADE 4	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction and independent reading. 2. Identify and understand root words, derivations, antonyms, synonyms, idioms, homonyms and multiple-meaning words to determine word meanings and to comprehend texts.

GRADE 4	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension.
GRADE 5	I. READING AND LITERATURE	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. Read unfamiliar, complex and multi-syllabic words using advanced phonetic and structural analysis.
GRADE 5	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction as well as independent reading.
GRADE 5	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension.
GRADE 6	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	4. Determine the meaning of unknown words using knowledge of common Greek and Latin roots, suffixes and prefixes.
GRADE 6	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 3. Actively listen and comprehend messages.
GRADE 7	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	1. Read unfamiliar complex and multi-syllabic words using cueing systems, advanced phonetic analysis and structural analysis.
GRADE 7	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit vocabulary instruction and independent reading. 5. Apply knowledge of Greek and Latin roots, prefixes and suffixes to understand content area vocabulary and assist pronunciation.
GRADE 7	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.

GRADE 8	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit and indirect vocabulary instruction and independent reading. 5. Apply knowledge of Greek and Latin roots, prefixes and suffixes to understand content area vocabulary. 8. Apply correct word pronunciation and inflection.
GRADE 8	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Actively listen and comprehend messages. 7. Participate effectively in group meetings.

### Animal Signs

GRADE 4	V. SPATIAL SENSE, GEOMETRY & MEASUREMENT	B. Geometry	Use attributes of two- and three-dimensional shapes to identify them and distinguish between them.	1. Identify, describe, and classify two- and three-dimensional shapes by their attributes.
GRADE 4	I. READING AND LITERATURE	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. Read unfamiliar complex and multi-syllabic words using advanced phonetic and structural analysis in grade-appropriate text.
GRADE 4	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction and independent reading.
GRADE 4	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension.
GRADE 5	I. READING AND LITERATURE	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. Read unfamiliar, complex and multi-syllabic words using advanced phonetic and structural analysis.

GRADE 5	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction as well as independent reading.
GRADE 5	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension.
GRADE 6	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 3. Actively listen and comprehend messages.
GRADE 7	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	1. Read unfamiliar complex and multi-syllabic words using cueing systems, advanced phonetic analysis and structural analysis.
GRADE 7	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit vocabulary instruction and independent reading.
GRADE 7	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.
GRADE 8	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit and indirect vocabulary instruction and independent reading. 8. Apply correct word pronunciation and inflection.
GRADE 8	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Actively listen and comprehend messages. 7. Participate effectively in group meetings.

## Big Freeze

GRADE 4	V. SPATIAL SENSE, GEOMETRY & MEASUREMENT	B. Geometry	Use attributes of two-and three-dimensional shapes to identify them and distinguish between them.	1. Identify, describe, and classify two- and three-dimensional shapes by their attributes.
GRADE 7	IV. LIFE SCIENCE	B. Diversity of Organisms	The student will understand that living systems, at every level of organization, demonstrate the complementary nature of structure and function.	2. The student will recognize that an organism's body plan and its ability to regulate its internal environment enable it to make or find food, grow and reproduce in a constantly changing environment.
GRADE 8	III. EARTH AND SPACE SCIENCE	C. The Universe	The student will compare objects in the solar system and explain their interactions with the Earth.	2. The student will explain how the combination of the Earth's tilted axis and revolution around the sun causes the progression of seasons and weather patterns.
GRADE 9–12	III. EARTH AND SPACE SCIENCE	B. The Water Cycle, Weather and Climate	The student will explain the causes and effects of the Earth's atmospheric and hydrologic processes.	3. The student will demonstrate the effect of the Earth's tilt, rotation and revolution on the seasons, day length and tides.
GRADE 4	IV. DATA ANALYSIS, STATISTICS & PROBABILITY	B. Probability	Model simple probabilities by displaying the outcomes for real-world and mathematical problems.	2. Use physical models and pictures to represent possible arrangements of two or three objects.
GRADE 4	I. READING AND LITERATURE	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. Read unfamiliar complex and multi-syllabic words using advanced phonetic and structural analysis in grade-appropriate text. 2. Read aloud narrative and expository text with fluency, accuracy, and appropriate pacing, intonation and expression.
GRADE 4	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction and independent reading.
GRADE 4	I. READING AND LITERATURE	C. Comprehension	The student will understand the meaning of texts, using a variety of strategies, and will demonstrate literal, interpretive, inferential and evaluative comprehension.	1. Read aloud grade-appropriate text (that has not been previewed) with

GRADE 4	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>2. Demonstrate active listening and comprehension.</li> </ol>
GRADE 5	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will decode unfamiliar words using phonetic and structural analysis and will read with fluency and expression.	<ol style="list-style-type: none"> <li>1. Read unfamiliar, complex and multi-syllabic words using advanced phonetic and structural analysis.</li> <li>2. Read aloud narrative and expository text with fluency, accuracy and appropriate pacing, intonation and expression.</li> </ol>
GRADE 5	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	<ol style="list-style-type: none"> <li>1. Acquire, understand and use new vocabulary through explicit instruction as well as independent reading.</li> </ol>
GRADE 5	I. READING AND LITERATURE	C. Comprehension	The student will understand the meaning of texts using a variety of strategies and will demonstrate literal, interpretive, inferential and evaluative comprehension.	<ol style="list-style-type: none"> <li>1. Read aloud grade-appropriate text (that has not been previewed) with accuracy and comprehension.</li> </ol>
GRADE 5	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>2. Demonstrate active listening and comprehension.</li> </ol>
GRADE 6	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	<ol style="list-style-type: none"> <li>2. Read narrative and expository text with fluency, accuracy and appropriate pacing.</li> <li>3. Apply correct word pronunciation and inflection.</li> </ol>
GRADE 6	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>3. Actively listen and comprehend messages.</li> </ol>
GRADE 7	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	<ol style="list-style-type: none"> <li>1. Read unfamiliar complex and multi-syllabic words using cueing systems, advanced phonetic analysis and structural analysis.</li> <li>2. Read narrative and expository text with fluency, accuracy and comprehension at an appropriate silent reading rate.</li> <li>3. Apply correct word pronunciation and inflection.</li> </ol>

GRADE 7	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit vocabulary instruction and independent reading.
GRADE 7	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.
GRADE 8	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit and indirect vocabulary instruction and independent reading. 8. Apply correct word pronunciation and inflection.
GRADE 8	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Actively listen and comprehend messages. 7. Participate effectively in group meetings.

### Birds

GRADE 4	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.
GRADE 4	IV. LIFE SCIENCE	B. Diversity of Organisms	The student will know that living things can be sorted into groups in many ways according to their varied characteristics, structures and behaviors.	1. The student will classify plants and animals according to their physical characteristics.
GRADE 4	I. READING AND LITERATURE	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. Read unfamiliar complex and multi-syllabic words using advanced phonetic and structural analysis in grade-appropriate text.
GRADE 4	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking	1. Acquire, understand and use new vocabulary through explicit instruction and independent reading.

			vocabularies.	
GRADE 4	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension.
GRADE 5	I. READING AND LITERATURE	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. Read unfamiliar, complex and multi-syllabic words using advanced phonetic and structural analysis.
GRADE 5	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction as well as independent reading.
GRADE 5	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension.
GRADE 6	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 3. Actively listen and comprehend messages.
GRADE 7	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	1. Read unfamiliar complex and multi-syllabic words using cueing systems, advanced phonetic analysis and structural analysis.
GRADE 7	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit vocabulary instruction and independent reading.
GRADE 7	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.
GRADE 8	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking	1. Acquire, understand and use new vocabulary through explicit and indirect vocabulary instruction and independent reading. 8. Apply correct word pronunciation and inflection.

			vocabularies.	
GRADE 8	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>2. Actively listen and comprehend messages.</li> <li>7. Participate effectively in group meetings.</li> </ol>

### Earth Exploration

GRADE 7	IV. LIFE SCIENCE	E. Biological Populations Change Over Time	The student will understand how biological evolution provides a scientific explanation for the fossil record of ancient life forms, as well as for the striking similarities observed among the diverse species of living organisms.	<ol style="list-style-type: none"> <li>2. The student will describe how the fossil record documents the appearance and diversification of many life forms.</li> </ol>
GRADE 8	III. EARTH AND SPACE SCIENCE	A. Earth Structure and Processes	The student will identify Earth's composition, structure and processes.	<ol style="list-style-type: none"> <li>1. The student will explain how earthquakes, volcanoes, sea-floor spreading and mountain building are evidence of the movement of crustal plates.</li> <li>3. The student will describe the various processes and interactions of the rock cycle.</li> <li>4. The student will interpret successive layers of sedimentary rocks and their fossils to document the age and history of the Earth.</li> <li>5. The student will recognize that constructive and destructive Earth processes can affect the evidence of Earth's history.</li> </ol>
GRADE 9–12	III. EARTH AND SPACE SCIENCE	A. Earth Structure and Processes	The student will understand that the interactions of the atmosphere, biosphere, lithosphere, hydrosphere and space have resulted in ongoing change of the Earth system over geologic time.	<ol style="list-style-type: none"> <li>4. The student will use the theory of plate tectonics to analyze relationships among earthquakes, volcanoes, mountains fossil deposits, rock layers and ocean features.</li> <li>5. The student will describe how glaciers, gravity, wind, temperature changes, waves and rivers cause weathering and erosion.</li> <li>6. The student will describe the rock cycle and compare and contrast the processes responsible for the formation of igneous, sedimentary and metamorphic rocks.</li> <li>7. The student will use evidence found in fossils, rock layers, <del>ice cores,</del> <del>radiometric dating</del> and globally gathered data to explain how Earth has changed over short and long periods of time.</li> </ol>

GRADE 4	V. SPATIAL SENSE, GEOMETRY & MEASUREMENT	B. Geometry	Use attributes of two- and three-dimensional shapes to identify them and distinguish between them.	1. Identify, describe, and classify two- and three-dimensional shapes by their attributes.
GRADE 4	I. READING AND LITERATURE	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. Read unfamiliar complex and multi-syllabic words using advanced phonetic and structural analysis in grade-appropriate text. 2. Read aloud narrative and expository text with fluency, accuracy, and appropriate pacing, intonation and expression.
GRADE 4	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction and independent reading. 2. Identify and understand root words, derivations, antonyms, synonyms, idioms, homonyms and multiple-meaning words to determine word meanings and to comprehend texts.
GRADE 4	I. READING AND LITERATURE	C. Comprehension	The student will understand the meaning of texts, using a variety of strategies, and will demonstrate literal, interpretive, inferential and evaluative comprehension.	1. Read aloud grade-appropriate text (that has not been previewed) with accuracy and comprehension.
GRADE 4	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension.
GRADE 5	I. READING AND LITERATURE	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. Read unfamiliar, complex and multi-syllabic words using advanced phonetic and structural analysis. 2. Read aloud narrative and expository text with fluency, accuracy and appropriate pacing, intonation and expression.
GRADE 5	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction as well as independent reading.
GRADE 5	I. READING AND LITERATURE	C. Comprehension	The student will understand the meaning of texts using a variety of strategies and will demonstrate literal, interpretive, inferential and evaluative comprehension.	1. Read aloud grade-appropriate text (that has not been previewed) with accuracy and comprehension.

GRADE 5	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension.
GRADE 6	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	2. Read narrative and expository text with fluency, accuracy and appropriate pacing. 3. Apply correct word pronunciation and inflection.
GRADE 6	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	4. Determine the meaning of unknown words using knowledge of common Greek and Latin roots, suffixes and prefixes.
GRADE 6	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 3. Actively listen and comprehend messages.
GRADE 7	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	1. Read unfamiliar complex and multi-syllabic words using cueing systems, advanced phonetic analysis and structural analysis. 2. Read narrative and expository text with fluency, accuracy and comprehension at an appropriate silent reading rate. 3. Apply correct word pronunciation and inflection.
GRADE 7	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit vocabulary instruction and independent reading. 5. Apply knowledge of Greek and Latin roots, prefixes and suffixes to understand content area vocabulary and assist pronunciation.
GRADE 7	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.
GRADE 8	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit and indirect vocabulary instruction and independent reading. 5. Apply knowledge of Greek and Latin roots, prefixes and suffixes to understand content area vocabulary. 8. Apply correct word pronunciation and inflection.
GRADE 8	III. SPEAKING, LISTENING AND	A. Speaking and Listening	The student will demonstrate understanding and communicate	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.

	VIEWING		effectively through listening and speaking.	2. Actively listen and comprehend messages. 7. Participate effectively in group meetings.
--	---------	--	---	--

### Fungus Among Us

GRADE 4	IV. LIFE SCIENCE	B. Diversity of Organisms	The student will know that living things can be sorted into groups in many ways according to their varied characteristics, structures and behaviors.	1. The student will classify plants and animals according to their physical characteristics.
GRADE 5	IV. LIFE SCIENCE	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 energy to stay alive and grow, and that this energy originates from the sun. 3. The student will recognize that organisms are growing, dying and decaying, and that their matter is recycled.
GRADE 7	IV. LIFE SCIENCE	B. Diversity of Organisms	The student will understand that living systems, at every level of organization, demonstrate the complementary nature of structure and function.	5. The student will use the characteristics of an organism to identify the kingdom to which it belongs.
GRADE 7	IV. LIFE SCIENCE	F. Flow of Matter and Energy	The student will understand how the flow of energy and the recycling of matter contribute to a stable ecosystem.	2. The student will explain how energy is transferred through food chains and food webs in an ecosystem.  5. The student will compare and contrast predator/prey, parasite/host and producer/consumer/decomposer relationships.
GRADE 4	V. SPATIAL SENSE, GEOMETRY & MEASUREMENT	B. Geometry	Use attributes of two- and three-dimensional shapes to identify them and distinguish between them.	1. Identify, describe, and classify two- and three-dimensional shapes by their attributes.
GRADE 4	I. READING AND LITERATURE	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. Read unfamiliar complex and multi-syllabic words using advanced phonetic and structural analysis in grade-appropriate text.
GRADE 4	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction and independent reading.

GRADE 4	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension.
GRADE 5	I. READING AND LITERATURE	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. Read unfamiliar, complex and multi-syllabic words using advanced phonetic and structural analysis.
GRADE 5	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction as well as independent reading.
GRADE 5	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension.
GRADE 6	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 3. Actively listen and comprehend messages.
GRADE 7	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	1. Read unfamiliar complex and multi-syllabic words using cueing systems, advanced phonetic analysis and structural analysis.
GRADE 7	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit vocabulary instruction and independent reading.
GRADE 7	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.
GRADE 8	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking	1. Acquire, understand and use new vocabulary through explicit and indirect vocabulary instruction and independent reading. 8. Apply correct word pronunciation and inflection.

			vocabularies.	
GRADE 8	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>2. Actively listen and comprehend messages.</li> <li>7. Participate effectively in group meetings.</li> </ol>

### Insects

GRADE 4	IV. LIFE SCIENCE	B. Diversity of Organisms	The student will know that living things can be sorted into groups in many ways according to their varied characteristics, structures and behaviors.	<ol style="list-style-type: none"> <li>1. The student will classify plants and animals according to their physical characteristics.</li> </ol>
GRADE 7	IV. LIFE SCIENCE	C. Interdependence of Life	The student will understand that within ecosystems, complex interactions exist between organisms and the physical environment.	<ol style="list-style-type: none"> <li>3. The student will define an ecosystem as all populations living together and the physical factors with which they interact.</li> </ol>
GRADE 4	V. SPATIAL SENSE, GEOMETRY & MEASUREMENT	B. Geometry	Use attributes of two- and three-dimensional shapes to identify them and distinguish between them.	<ol style="list-style-type: none"> <li>1. Identify, describe, and classify two- and three-dimensional shapes by their attributes.</li> </ol>
GRADE 4	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will decode unfamiliar words using phonetic and structural analysis and will read with fluency and expression.	<ol style="list-style-type: none"> <li>1. Read unfamiliar complex and multi-syllabic words using advanced phonetic and structural analysis in grade-appropriate text.</li> </ol>
GRADE 4	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	<ol style="list-style-type: none"> <li>1. Acquire, understand and use new vocabulary through explicit instruction and independent reading.</li> </ol>
GRADE 4	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>2. Demonstrate active listening and comprehension.</li> </ol>
GRADE 5	I. READING AND LITERATURE	A. Word Recognition,	The student will decode unfamiliar words using phonetic	<ol style="list-style-type: none"> <li>1. Read unfamiliar, complex and multi-syllabic words using advanced phonetic and structural analysis.</li> </ol>

		Analysis, and Fluency	and structural analysis and will read with fluency and expression.	
GRADE 5	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction as well as independent reading.
GRADE 5	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension.
GRADE 6	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 3. Actively listen and comprehend messages.
GRADE 7	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	1. Read unfamiliar complex and multi-syllabic words using cueing systems, advanced phonetic analysis and structural analysis.
GRADE 7	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit vocabulary instruction and independent reading. 5. Apply knowledge of Greek and Latin roots, prefixes and suffixes to understand content area vocabulary and assist pronunciation.
GRADE 7	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.
GRADE 8	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit and indirect vocabulary instruction and independent reading. 8. Apply correct word pronunciation and inflection.
GRADE 8	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Actively listen and comprehend messages. 7. Participate effectively in group meetings.

## Karst Geology

GRADE 5	I. HISTORY AND NATURE OF 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.
GRADE 7	IV. LIFE SCIENCE	C. Interdependence of Life	The student will understand that within ecosystems, complex interactions exist between organisms and the physical environment.	1. The student will provide examples of the potentially irreversible effects of human activity on ecosystems.
GRADE 8	III. EARTH AND SPACE SCIENCE	A. Earth Structure and Processes	The student will identify Earth's composition, structure and processes.	6. The student will classify and identify rocks and minerals using characteristics including but not limited to density, hardness and streak.
GRADE 4	II. NUMBER SENSE, COMPUTATION & OPERATIONS	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. Use addition and subtraction of multi-digit whole numbers to solve multi-step real-world and mathematical problems. 5. Use multiplication and division of whole numbers to solve simple real-world and mathematical problems.
GRADE 5	II. NUMBER SENSE, COMPUTATION & OPERATIONS	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. Use addition, subtraction, multiplication and division of multi-digit whole numbers to solve multi-step, real-world and mathematical problems.
GRADE 4	I. READING AND LITERATURE	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. Read unfamiliar complex and multi-syllabic words using advanced phonetic and structural analysis in grade-appropriate text.
GRADE 4	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction and independent reading. 2. Identify and understand root words, derivations, antonyms, synonyms, idioms, homonyms and multiple-meaning words to determine word meanings and to comprehend texts.

GRADE 4	I. READING AND LITERATURE	C. Comprehension	The student will understand the meaning of texts, using a variety of strategies, and will demonstrate literal, interpretive, inferential and evaluative comprehension.	9. Follow multiple-step written instructions.
GRADE 4	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension. 3. Give oral presentations to different audiences for different purposes.
GRADE 5	I. READING AND LITERATURE	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. Read unfamiliar, complex and multi-syllabic words using advanced phonetic and structural analysis.
GRADE 5	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction as well as independent reading.
GRADE 5	I. READING AND LITERATURE	C. Comprehension	The student will understand the meaning of texts using a variety of strategies and will demonstrate literal, interpretive, inferential and evaluative comprehension.	13. Follow multiple-step written directions.
GRADE 5	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension. 4. Give oral presentations to various audiences for different purposes.
GRADE 6	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	4. Determine the meaning of unknown words using knowledge of common Greek and Latin roots, suffixes and prefixes.
GRADE 6	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 3. Actively listen and comprehend messages. 6. Orally communicate information, opinions and ideas effectively to different

				audiences for a variety of purposes.
GRADE 7	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	1. Read unfamiliar complex and multi-syllabic words using cueing systems, advanced phonetic analysis and structural analysis.
GRADE 7	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit vocabulary instruction and independent reading. 5. Apply knowledge of Greek and Latin roots, prefixes and suffixes to understand content area vocabulary and assist pronunciation.
GRADE 7	I. READING AND LITERATURE	C. Comprehension	The student will understand the meaning of texts, using a variety of strategies, and will demonstrate literal, interpretive, inferential and evaluative comprehension.	9. Follow written directions in technical reading.
GRADE 7	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 6. Orally communicate information, opinions, and ideas effectively to different audiences for a variety of purposes.
GRADE 8	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit and indirect vocabulary instruction and independent reading. 5. Apply knowledge of Greek and Latin roots, prefixes and suffixes to understand content area vocabulary. 8. Apply correct word pronunciation and inflection.
GRADE 8	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Actively listen and comprehend messages. 6. Orally communicate information, opinions and ideas effectively to different audiences, adjusting delivery and language for intended audience and purpose. 7. Participate effectively in group meetings.
GRADE 9, 10, 11, 12	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will apply a variety of strategies to expand vocabulary.	4. Apply knowledge of Greek and Latin roots, prefixes and suffixes to understand content area vocabulary.

## Mammals

GRADE 4	IV. LIFE SCIENCE	B. Diversity of Organisms	The student will know that living things can be sorted into groups in many ways according to their varied characteristics, structures and behaviors.	1. The student will classify plants and animals according to their physical characteristics.
GRADE 7	IV. LIFE SCIENCE	F. Flow of Matter and Energy	The student will understand how the flow of energy and the recycling of matter contribute to a stable ecosystem.	5. The student will compare and contrast predator/prey, parasite/host and producer/consumer/decomposer relationships.
GRADE 4	I. READING AND LITERATURE	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. Read unfamiliar complex and multi-syllabic words using advanced phonetic and structural analysis in grade-appropriate text.
GRADE 4	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction and independent reading.
GRADE 4	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension.
GRADE 5	I. READING AND LITERATURE	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. Read unfamiliar, complex and multi-syllabic words using advanced phonetic and structural analysis.
GRADE 5	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction as well as independent reading.
GRADE 5	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension.
GRADE 6	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 3. Actively listen and comprehend messages.

			speaking.	
GRADE 7	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	1. Read unfamiliar complex and multi-syllabic words using cueing systems, advanced phonetic analysis and structural analysis.
GRADE 7	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit vocabulary instruction and independent reading.
GRADE 7	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.
GRADE 8	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit and indirect vocabulary instruction and independent reading. 8. Apply correct word pronunciation and inflection.
GRADE 8	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Actively listen and comprehend messages. 7. Participate effectively in group meetings.

### Pond Life

GRADE 4	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.
GRADE 4	IV. LIFE SCIENCE	B. Diversity of Organisms	The student will know that living things can be sorted into groups in many ways according to their varied characteristics, structures and behaviors.	1. The student will classify plants and animals according to their physical characteristics.

GRADE 7	IV. LIFE SCIENCE	E. Biological Populations Change Over Time	The student will understand how biological evolution provides a scientific explanation for the fossil record of ancient life forms, as well as for the striking similarities observed among the diverse species of living organisms.	3. The student will explain how biological adaptations in structure, function and behavior enhance the reproductive success and survival of a species in a particular environment.
GRADE 4	V. SPATIAL SENSE, GEOMETRY & MEASUREMENT	B. Geometry	Use attributes of two- and three-dimensional shapes to identify them and distinguish between them.	1. Identify, describe, and classify two- and three-dimensional shapes by their attributes.
GRADE 4	I. READING AND LITERATURE	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. Read unfamiliar complex and multi-syllabic words using advanced phonetic and structural analysis in grade-appropriate text.
GRADE 4	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction and independent reading. 2. Identify and understand root words, derivations, antonyms, synonyms, idioms, homonyms and multiple-meaning words to determine word meanings and to comprehend texts.
GRADE 4	II. WRITING	D. Research	The student will locate and use information in reference materials.	1. Locate information in various reference materials including dictionaries, online dictionaries, glossaries, encyclopedias, and the Internet.
GRADE 4	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension. 3. Give oral presentations to different audiences for different purposes.
GRADE 5	I. READING AND LITERATURE	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. Read unfamiliar, complex and multi-syllabic words using advanced phonetic and structural analysis.
GRADE 5	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction as well as independent reading.

GRADE 5	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>2. Demonstrate active listening and comprehension.</li> <li>4. Give oral presentations to various audiences for different purposes.</li> </ol>
GRADE 6	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	<ol style="list-style-type: none"> <li>4. Determine the meaning of unknown words using knowledge of common Greek and Latin roots, suffixes and prefixes.</li> </ol>
GRADE 6	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>3. Actively listen and comprehend messages.</li> <li>6. Orally communicate information, opinions and ideas effectively to different audiences for a variety of purposes.</li> </ol>
GRADE 7	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	<ol style="list-style-type: none"> <li>1. Read unfamiliar complex and multi-syllabic words using cueing systems, advanced phonetic analysis and structural analysis.</li> </ol>
GRADE 7	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	<ol style="list-style-type: none"> <li>1. Acquire, understand and use new vocabulary through explicit vocabulary instruction and independent reading.</li> <li>5. Apply knowledge of Greek and Latin roots, prefixes and suffixes to understand content area vocabulary and assist pronunciation.</li> </ol>
GRADE 7	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>6. Orally communicate information, opinions, and ideas effectively to different audiences for a variety of purposes.</li> </ol>
GRADE 8	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	<ol style="list-style-type: none"> <li>1. Acquire, understand and use new vocabulary through explicit and indirect vocabulary instruction and independent reading.</li> <li>5. Apply knowledge of Greek and Latin roots, prefixes and suffixes to understand content area vocabulary.</li> <li>8. Apply correct word pronunciation and inflection.</li> </ol>
GRADE 8	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>2. Actively listen and comprehend messages.</li> <li>6. Orally communicate information, opinions and ideas effectively to different audiences, adjusting delivery and language for intended audience and purpose.</li> <li>7. Participate effectively in group meetings.</li> </ol>

## Stream Lab

GRADE 4	I. HISTORY AND NATURE OF SCIENCE	B. Scientific Inquiry	The student will participate in a controlled scientific investigation.	2. The student will collect, organize, analyze and present data from a controlled experiment.
GRADE 4	III EARTH & 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.
GRADE 5	I. HISTORY AND NATURE OF 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.
GRADE 6	I. HISTORY AND NATURE OF SCIENCE	B. Scientific Inquiry	The student will understand that scientific inquiry is used in systematic ways to investigate the natural world.	4. The student will present and explain data and findings from controlled experiments using multiple representations including tables, graphs, physical models and demonstrations.
GRADE 7	IV. LIFE SCIENCE	C. Interdependence of Life	The student will understand that within ecosystems, complex interactions exist between organisms and the physical environment.	1. The student will provide examples of the potentially irreversible effects of human activity on ecosystems.
GRADE 4	II. NUMBER SENSE, COMPUTATION, AND OPERATIONS	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. Use addition and subtraction of multi-digit whole numbers to solve multi-step real-world and mathematical problems. 5. Use multiplication and division of whole numbers to solve simple real-world and mathematical problems.
GRADE 4	III. PATTERNS, FUNCTIONS & ALGEBRA	A. Patterns and Functions	Understand and describe patterns in tables and graphs.	1. Examine and describe patterns in tables and graphs.

GRADE 4	IV. DATA ANALYSIS, STATISTICS & PROBABILITY	A. Data and Statistics	Represent and interpret data in real-world and mathematical problems.	1. Collect data using observations or surveys and represent the data with tables and graphs with labeling.
GRADE 4	IV. DATA ANALYSIS, STATISTICS, & PROBABILITY	B. Probability	Model simple probabilities by displaying the outcomes for real-world and mathematical problems.	1. Express outcomes of random experiments verbally and numerically such as 3 out of 4 or $\frac{3}{4}$ .
GRADE 5	I. MATHEMATICAL REASONING		Apply skills of mathematical representation, communication and reasoning throughout the remaining four content strands.	3. Evaluate the reasonableness of the solution by considering appropriate estimates and the context of the original problem. 7. Organize, record and communicate math ideas coherently and clearly.
GRADE 5	II. NUMBER SENSE, COMPUTATION 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.	1. Read and write numbers up to three decimal places in numerals and words.
GRADE 5	IV. DATA ANALYSIS, STATISTICS & PROBABILITY	A. Data and Statistics	Represent data and use various measures associated with data to draw conclusions and identify trends.	3. Collect data using measurements, surveys or experiments and represent the data with tables and graphs with labeling.
GRADE 6	IV. DATA ANALYSIS, STATISTICS & PROBABILITY	A. Data and Statistics	Represent data and use various measures associated with data to draw conclusions and identify trends.	
GRADE 4	I. READING AND LITERATURE	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. Read unfamiliar complex and multi-syllabic words using advanced phonetic and structural analysis in grade-appropriate text. 2. Read aloud narrative and expository text with fluency, accuracy, and appropriate pacing, intonation and expression.
GRADE 4	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction and independent reading.

GRADE 4	I. READING AND LITERATURE	C. Comprehension	The student will understand the meaning of texts, using a variety of strategies, and will demonstrate literal, interpretive, inferential and evaluative comprehension.	<ol style="list-style-type: none"> <li>1. Read aloud grade-appropriate text (that has not been previewed) with accuracy and comprehension.</li> <li>9. Follow multiple-step written instructions.</li> </ol>
GRADE 4	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>2. Demonstrate active listening and comprehension.</li> <li>3. Give oral presentations to different audiences for different purposes.</li> <li>4. Organize and summarize ideas, using evidence to support opinions or main ideas.</li> </ol>
GRADE 5	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will decode unfamiliar words using phonetic and structural analysis and will read with fluency and expression.	<ol style="list-style-type: none"> <li>1. Read unfamiliar, complex and multi-syllabic words using advanced phonetic and structural analysis.</li> <li>2. Read aloud narrative and expository text with fluency, accuracy and appropriate pacing, intonation and expression.</li> </ol>
GRADE 5	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	<ol style="list-style-type: none"> <li>1. Acquire, understand and use new vocabulary through explicit instruction as well as independent reading.</li> </ol>
GRADE 5	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>2. Demonstrate active listening and comprehension.</li> <li>4. Give oral presentations to various audiences for different purposes.</li> </ol>
GRADE 6	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	<ol style="list-style-type: none"> <li>2. Read narrative and expository text with fluency, accuracy and appropriate pacing.</li> <li>3. Apply correct word pronunciation and inflection.</li> </ol>
GRADE 6	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>3. Actively listen and comprehend messages.</li> <li>6. Orally communicate information, opinions and ideas effectively to different audiences for a variety of purposes.</li> </ol>
GRADE 7	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	<ol style="list-style-type: none"> <li>1. Read unfamiliar complex and multi-syllabic words using cueing systems, advanced phonetic analysis and structural analysis.</li> <li>2. Read narrative and expository text with fluency, accuracy and comprehension at an appropriate silent reading rate.</li> <li>3. Apply correct word pronunciation and inflection.</li> </ol>

GRADE 7	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit vocabulary instruction and independent reading.
GRADE 7	I. READING AND LITERATURE	C. Comprehension	The student will understand the meaning of texts, using a variety of strategies, and will demonstrate literal, interpretive, inferential and evaluative comprehension.	9. Follow written directions in technical reading.
GRADE 7	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 6. Orally communicate information, opinions, and ideas effectively to different audiences for a variety of purposes.
GRADE 8	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit and indirect vocabulary instruction and independent reading. 8. Apply correct word pronunciation and inflection.
GRADE 8	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Actively listen and comprehend messages. 6. Orally communicate information, opinions and ideas effectively to different audiences, adjusting delivery and language for intended audience and purpose. 7. Participate effectively in group meetings.

### River Ecology

GRADE 7	IV. LIFE SCIENCE	C. Interdependence of Life	The student will understand that within ecosystems, complex interactions exist between organisms and the physical environment.	1. The student will provide examples of the potentially irreversible effects of human activity on ecosystems.
GRADE 8	I. HISTORY AND NATURE OF SCIENCE	B. Scientific Inquiry	The student will understand that scientific inquiry is used by scientists to investigate the natural world in systematic ways.	1. The student will know that scientific investigations involve the common elements of systematic observations, the careful collection of relevant evidence, logical reasoning and innovation in developing hypotheses and explanations.

GRADE 8	I. HISTORY AND NATURE OF SCIENCE	B. Scientific Inquiry	The student will use multiple skills to design and conduct scientific investigations.	2. The student will use sufficient trials and adequate sample size to ensure reliable data.
GRADE 9–12	I. HISTORY AND NATURE OF SCIENCE	B. Scientific Inquiry	The student will design and conduct a scientific investigation.	4. The student will identify possible sources of error and their effects on results.
GRADE 9–12	III. EARTH AND SPACE SCIENCE	B. The Water Cycle, Weather and Climate	The student will explain the causes and effects of the Earth’s atmospheric and hydrologic processes.	4. The student will identify, predict and investigate the factors that influence the quality of water and how it can be reused, recycled and conserved.

GRADE 7	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	<ol style="list-style-type: none"> <li>1. Read unfamiliar complex and multi-syllabic words using cueing systems, advanced phonetic analysis and structural analysis.</li> <li>2. Read narrative and expository text with fluency, accuracy and comprehension at an appropriate silent reading rate.</li> <li>3. Apply correct word pronunciation and inflection.</li> </ol>
GRADE 7	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	<ol style="list-style-type: none"> <li>1. Acquire, understand and use new vocabulary through explicit vocabulary instruction and independent reading.</li> </ol>
GRADE 7	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>6. Orally communicate information, opinions, and ideas effectively to different audiences for a variety of purposes.</li> </ol>
GRADE 8	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	<ol style="list-style-type: none"> <li>1. Acquire, understand and use new vocabulary through explicit and indirect vocabulary instruction and independent reading.</li> <li>8. Apply correct word pronunciation and inflection.</li> </ol>
GRADE 8	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>2. Actively listen and comprehend messages.</li> <li>6. Orally communicate information, opinions and ideas effectively to different audiences, adjusting delivery and language for intended audience and purpose.</li> <li>7. Participate effectively in group meetings.</li> </ol>

## Trees and Keys

GRADE 7	IV. LIFE SCIENCE	B. Diversity of Organisms	The student will understand that living systems, at every level of organization, demonstrate the complementary nature of structure and function.	4. The student will use and create dichotomous keys.
GRADE 4	V. SPATIAL SENSE, GEOMETRY & MEASUREMENT	B. Geometry	Use attributes of two- and three-dimensional shapes to identify them and distinguish between them.	1. Identify, describe, and classify two- and three-dimensional shapes by their attributes.
GRADE 4	I. READING AND LITERATURE	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. Read unfamiliar complex and multi-syllabic words using advanced phonetic and structural analysis in grade-appropriate text.
GRADE 4	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction and independent reading.
GRADE 4	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension.
GRADE 5	I. READING AND LITERATURE	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. Read unfamiliar, complex and multi-syllabic words using advanced phonetic and structural analysis.
GRADE 5	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction as well as independent reading.
GRADE 5	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension.
GRADE 6	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 3. Actively listen and comprehend messages.

GRADE 7	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	1. Read unfamiliar complex and multi-syllabic words using cueing systems, advanced phonetic analysis and structural analysis.
GRADE 7	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit vocabulary instruction and independent reading.
GRADE 7	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.
GRADE 8	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit and indirect vocabulary instruction and independent reading. 8. Apply correct word pronunciation and inflection.
GRADE 8	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Actively listen and comprehend messages. 7. Participate effectively in group meetings.

### Wildlife Ecology

GRADE 4	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.
GRADE 5	IV. LIFE SCIENCE	E. Biological Populations Change Over Time	The student will know that biological populations change over time.	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.
GRADE 5	IV. LIFE SCIENCE	F. Flow of Matter and Energy	The student will know that matter and energy flow into, out of, and within a biological system.	2. The student will use food webs to describe the relationships among producers, consumers, and decomposers in an ecosystem in Minnesota.

GRADE 7	IV. LIFE SCIENCE	C. Interdependence of Life	The student will understand that within ecosystems, complex interactions exist between organisms and the physical environment.	<p>2. The student will define a population as all individuals of a species that exist together at a given place and time.</p> <p>4. The student will explain the factors that affect the number and types of organisms an ecosystem can support, including available resources, abiotic and biotic factors and disease.</p>
GRADE 7	IV. LIFE SCIENCE	F. Flow of Matter and Energy	The student will understand how the flow of energy and the recycling of matter contribute to a stable ecosystem.	<p>5. The student will compare and contrast predator/prey, parasite/host and producer/consumer/decomposer relationships.</p>
GRADE 9–12	IV. LIFE SCIENCE	C. Interdependence of Life	The student will describe how the environment and interactions between organisms can affect the number of species and the diversity of species in an ecosystem.	<p>1. The student will describe the factors related to matter and energy in an ecosystem that both influence fluctuations in population size and determine the carrying capacity of a population.</p> <p>4. The student will predict and analyze how a change in an ecosystem, resulting from natural causes, changes in climate, human activity or introduction of invasive species, can affect both the number of organisms in a population and the biodiversity of species in the ecosystem.</p>
GRADE 4	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 fractions and decimals.	<p>1. Read and write whole numbers to 100,000, in numerals and words.</p> <p>2. Compare and order whole numbers.</p> <p>3. Use fractions and decimals to solve problems representing parts of a whole, parts of a set and division of whole numbers by whole numbers in real-world and mathematical problems.</p>

GRADE 4	III. PATTERNS, FUNCTIONS AND ALGEBRA	A. Patterns and Functions	Understand and describe patterns in tables and graphs.	1. Examine and describe patterns in tables and graphs.
GRADE 4	IV. DATA ANALYSIS, STATISTICS AND PROBABILITY	A. Data and Statistics	Represent and interpret data in real-world and mathematical problems.	1. Collect data using observations or surveys and represent the data with tables and graphs with labeling.
GRADE 5	III. PATTERNS, FUNCTIONS AND ALGEBRA	A. Patterns and Functions	Understand and describe patterns in numbers, shapes, tables and graphs.	1. Identify patterns in numbers, shapes, tables, and graphs and explain how to extend those patterns.
GRADE 5	IV. DATA ANALYSIS, STATISTICS AND PROBABILITY	A. Data and Statistics	Represent data and use various measures associated with data to draw conclusions and identify trends.	3. Collect data using measurements, surveys or experiments <del>and represent the data with tables and graphs with labeling.</del>
GRADE 6	IV. DATA ANALYSIS, STATISTICS AND PROBABILITY	A. Data and Statistics	Represent data and use various measures associated with data to draw conclusions and identify trends.	
GRADE 4	I. READING AND LITERATURE	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. Read unfamiliar complex and multi-syllabic words using advanced phonetic and structural analysis in grade-appropriate text.
GRADE 4	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction and independent reading. 2. Identify and understand root words, derivations, antonyms, synonyms, idioms, homonyms and multiple-meaning words to determine word meanings and to comprehend texts.
GRADE 4	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension.

			listening and speaking.	3. Give oral presentations to different audiences for different purposes.
GRADE 5	I. READING AND LITERATURE	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. Read unfamiliar, complex and multi-syllabic words using advanced phonetic and structural analysis.
GRADE 5	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction as well as independent reading.
GRADE 5	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Demonstrate active listening and comprehension. 4. Give oral presentations to various audiences for different purposes.
GRADE 6	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	4. Determine the meaning of unknown words using knowledge of common Greek and Latin roots, suffixes and prefixes.
GRADE 6	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 3. Actively listen and comprehend messages. 6. Orally communicate information, opinions and ideas effectively to different audiences for a variety of purposes.
GRADE 7	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	1. Read unfamiliar complex and multi-syllabic words using cueing systems, advanced phonetic analysis and structural analysis.
GRADE 7	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit vocabulary instruction and independent reading. 5. Apply knowledge of Greek and Latin roots, prefixes and suffixes to understand content area vocabulary and assist pronunciation.
GRADE 7	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 6. Orally communicate information, opinions, and ideas effectively to different audiences for a variety of purposes.
GRADE 8	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading,	1. Acquire, understand and use new vocabulary through explicit and indirect vocabulary instruction and independent reading.

			listening and speaking vocabularies.	5. Apply knowledge of Greek and Latin roots, prefixes and suffixes to understand content area vocabulary. 8. Apply correct word pronunciation and inflection.
GRADE 8	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups. 2. Actively listen and comprehend messages. 6. Orally communicate information, opinions and ideas effectively to different audiences, adjusting delivery and language for intended audience and purpose. 7. Participate effectively in group meetings.

### Winter Pond Lab

GRADE 4	I. HISTORY AND NATURE OF SCIENCE	B. Scientific Inquiry	The student will participate in a controlled scientific investigation.	2. The student will collect, organize, analyze and present data from a controlled experiment.
GRADE 4	III EARTH & 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.

GRADE 5	I. HISTORY AND NATURE OF SCIENCE	B. Scientific Inquiry	The student will understand the process of scientific investigations.	<ol style="list-style-type: none"> <li>1. The student will perform a controlled experiment using a specific step-by-step procedure and present conclusions supported by the evidence.</li> <li>2. The student will observe that when a science investigation or experiment is repeated, a similar result is expected.</li> </ol>
GRADE 6	I. HISTORY AND NATURE OF SCIENCE	B. Scientific Inquiry	The student will understand that scientific inquiry is used in systematic ways to investigate the natural world.	<ol style="list-style-type: none"> <li>4. The student will present and explain data and findings from controlled experiments using multiple representations including tables, graphs, physical models and demonstrations.</li> </ol>
GRADE 7	IV. LIFE SCIENCE	C. Interdependence of Life	The student will understand that within ecosystems, complex interactions exist between organisms and the physical environment.	<ol style="list-style-type: none"> <li>1. The student will provide examples of the potentially irreversible effects of human activity on ecosystems.</li> </ol>
GRADE 4	II. NUMBER SENSE, COMPUTATION, AND OPERATIONS	B. Computation and Operation	<p>Compute fluently and make reasonable estimates with whole numbers in real-world and mathematical problems.</p> <p>Understand the meanings of arithmetic operations and how they relate to one another.</p>	<ol style="list-style-type: none"> <li>1. Use addition and subtraction of multi-digit whole numbers to solve multi-step real-world and mathematical problems.</li> <li>5. Use multiplication and division of whole numbers to solve simple real-world and mathematical problems.</li> </ol>
GRADE 4	III. PATTERNS, FUNCTIONS & ALGEBRA	A. Patterns and Functions	Understand and describe patterns in tables and graphs.	<ol style="list-style-type: none"> <li>1. Examine and describe patterns in tables and graphs.</li> </ol>

GRADE 4	IV. DATA ANALYSIS, STATISTICS & PROBABILITY	A. Data and Statistics	Represent and interpret data in real-world and mathematical problems.	1. Collect data using observations or surveys and represent the data with tables and graphs with labeling.
GRADE 4	IV. DATA ANALYSIS, STATISTICS, & PROBABILITY	B. Probability	Model simple probabilities by displaying the outcomes for real-world and mathematical problems.	1. Express outcomes of random experiments verbally and numerically such as 3 out of 4 or $\frac{3}{4}$ .
GRADE 5	I. MATHEMATICAL REASONING		Apply skills of mathematical representation, communication and reasoning throughout the remaining four content strands.	3. Evaluate the reasonableness of the solution by considering appropriate estimates and the context of the original problem. 7. Organize, record and communicate math ideas coherently and clearly.
GRADE 5	II. NUMBER SENSE, COMPUTATION 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.	1. Read and write numbers up to three decimal places in numerals and words.
GRADE 5	IV. DATA ANALYSIS, STATISTICS & PROBABILITY	A. Data and Statistics	Represent data and use various measures associated with data to draw conclusions and identify trends.	3. Collect data using measurements, surveys or experiments and represent the data with tables and graphs with labeling.
GRADE 6	IV. DATA ANALYSIS, STATISTICS & PROBABILITY	A. Data and Statistics	Represent data and use various measures associated with data to draw conclusions and identify trends.	
GRADE 4	I. READING AND LITERATURE	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. Read unfamiliar complex and multi-syllabic words using advanced phonetic and structural analysis in grade-appropriate text. 2. Read aloud narrative and expository text with fluency, accuracy, and appropriate pacing, intonation and expression.
GRADE 4	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	1. Acquire, understand and use new vocabulary through explicit instruction and independent reading.

GRADE 4	I. READING AND LITERATURE	C. Comprehension	The student will understand the meaning of texts, using a variety of strategies, and will demonstrate literal, interpretive, inferential and evaluative comprehension.	<ol style="list-style-type: none"> <li>1. Read aloud grade-appropriate text (that has not been previewed) with accuracy and comprehension.</li> <li>9. Follow multiple-step written instructions.</li> </ol>
GRADE 4	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>2. Demonstrate active listening and comprehension.</li> <li>3. Give oral presentations to different audiences for different purposes.</li> <li>4. Organize and summarize ideas, using evidence to support opinions or main ideas.</li> </ol>
GRADE 5	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will decode unfamiliar words using phonetic and structural analysis and will read with fluency and expression.	<ol style="list-style-type: none"> <li>1. Read unfamiliar, complex and multi-syllabic words using advanced phonetic and structural analysis.</li> <li>2. Read aloud narrative and expository text with fluency, accuracy and appropriate pacing, intonation and expression.</li> </ol>
GRADE 5	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	<ol style="list-style-type: none"> <li>1. Acquire, understand and use new vocabulary through explicit instruction as well as independent reading.</li> </ol>
GRADE 5	I. READING AND LITERATURE	C. Comprehension	The student will understand the meaning of texts using a variety of strategies and will demonstrate literal, interpretive, inferential and evaluative comprehension.	<ol style="list-style-type: none"> <li>1. Read aloud grade-appropriate text (that has not been previewed) with accuracy and comprehension.</li> <li>13. Follow multiple-step written directions.</li> </ol>
GRADE 5	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>2. Demonstrate active listening and comprehension.</li> <li>4. Give oral presentations to various audiences for different purposes.</li> </ol>
GRADE 6	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	<ol style="list-style-type: none"> <li>2. Read narrative and expository text with fluency, accuracy and appropriate pacing.</li> <li>3. Apply correct word pronunciation and inflection.</li> </ol>
GRADE 6	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>3. Actively listen and comprehend messages.</li> <li>6. Orally communicate information, opinions and ideas effectively to different</li> </ol>

				audiences for a variety of purposes.
GRADE 7	I. READING AND LITERATURE	A. Word Recognition, Analysis, and Fluency	The student will read with accuracy and fluency.	<ol style="list-style-type: none"> <li>1. Read unfamiliar complex and multi-syllabic words using cueing systems, advanced phonetic analysis and structural analysis.</li> <li>2. Read narrative and expository text with fluency, accuracy and comprehension at an appropriate silent reading rate.</li> <li>3. Apply correct word pronunciation and inflection.</li> </ol>
GRADE 7	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	<ol style="list-style-type: none"> <li>1. Acquire, understand and use new vocabulary through explicit vocabulary instruction and independent reading.</li> </ol>
GRADE 7	I. READING AND LITERATURE	C. Comprehension	The student will understand the meaning of texts, using a variety of strategies, and will demonstrate literal, interpretive, inferential and evaluative comprehension.	<ol style="list-style-type: none"> <li>9. Follow written directions in technical reading.</li> </ol>
GRADE 7	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	Students will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>6. Orally communicate information, opinions, and ideas effectively to different audiences for a variety of purposes.</li> </ol>
GRADE 8	I. READING AND LITERATURE	B. Vocabulary Expansion	The student will use a variety of strategies to expand reading, listening and speaking vocabularies.	<ol style="list-style-type: none"> <li>1. Acquire, understand and use new vocabulary through explicit and indirect vocabulary instruction and independent reading.</li> <li>8. Apply correct word pronunciation and inflection.</li> </ol>
GRADE 8	III. SPEAKING, LISTENING AND VIEWING	A. Speaking and Listening	The student will demonstrate understanding and communicate effectively through listening and speaking.	<ol style="list-style-type: none"> <li>1. Participate in and follow agreed-upon rules for conversation and formal discussions in large and small groups.</li> <li>2. Actively listen and comprehend messages.</li> <li>6. Orally communicate information, opinions and ideas effectively to different audiences, adjusting delivery and language for intended audience and purpose.</li> <li>7. Participate effectively in group meetings.</li> </ol>