

The *Michigan Harvest of the Month*™ featured vegetable is

greens



Botanical Facts

Adventurous Activities School Garden: Parts of a Plant

English Language Arts

Strand: Language

Category: Vocabulary Acquisition and Use

Anchor Standard #4: **CCSS.ELA-LITERACY.CCRA.L.4**

Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.

GRADES	STANDARD CODES	STANDARD TEXTS
Kindergarten	CCSS.ELA-LITERACY.L.K.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.
Grade One	CCSS.ELA-LITERACY.L.1.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content, choosing flexibly from an array of strategies.
Grade Two	CCSS.ELA-LITERACY.L.2.4.E	Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.
Grade Three	CCSS.ELA-LITERACY.L.3.4.D	Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.
Grade Four Grade Five	CCSS.ELA-LITERACY.L.4.4.C CCSS.ELA-LITERACY.L.5.4.C	Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.
Grade Six	CCSS.ELA-LITERACY.L.6.4.C	Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.
Grade Seven Grade Eight	CCSS.ELA-LITERACY.L.7.4.C CCSS.ELA-LITERACY.L.8.4.C	Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.

Botanical Facts continued

GRADES	STANDARD CODES	STANDARD TEXTS
Grade Band 9-10	CCSS.ELA-LITERACY.L.9-10.4.C	Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, or its etymology.
Grade Band 11-12	CCSS.ELA-LITERACY.L.11-12.4.C	Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage.

Physical Activity Corner: Class Activity

Mathematics

K-5 Measurement & Data

6-7 Geometry

8-12 Math Practice 4

GRADES	STANDARD CODES	STANDARD TEXTS
Kindergarten	CCSS.MATH.CONTENT.K.MD.A.2	Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.
Grade One	CCSS.MATH.CONTENT.1.MD.A.2	Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps.
Grade Two	CCSS.MATH.CONTENT.2.MD.A.3	Estimate lengths using units of inches, feet, centimeters, and meters.
Grade Three	CCSS.MATH.CONTENT.3.MD.B.3	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs.
Grade Four	CCSS.MATH.CONTENT.4.MD.A.2	Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.
Grade Five	CCSS.MATH.CONTENT.5.MD.A.1	Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.

Physical Activity Corner: Class Activity, continued

GRADES	STANDARD CODES	STANDARD TEXTS
Grade Six	CCSS.MATH.CONTENT.6.G.A.3	Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.
Grade Seven	CCSS.MATH.CONTENT.7.G.A.1	Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.
Grades 8-12	CCSS.MATH.PRACTICE.MP4	Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later.

Literature Links

ENGLISH LANGUAGE ARTS	COLUMN A INFORMATION TEXTS	COLUMN B FICTION TEXTS
Reading anchor standards #1 and #2	CCSS.ELA-LITERACY.CCRA.R.1 <i>Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.</i>	CCSS.ELA.LITERACY.CCRA.R.2 <i>Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.</i>
Strands	Reading Informational Text	Reading Literature
Categories	Key Ideas and Details	Key Ideas and Details
Kindergarten	CCSS.ELA-LITERACY.RI.K.1 With prompting and support, ask and answer questions about key details in a text.	CCSS.ELA-LITERACY.RL.K.2 With prompting and support, retell familiar stories, including key details.
Grade One	CCSS.ELA-LITERACY.RI.1.1 Ask and answer questions about key details in a text.	CCSS.ELA-LITERACY.RL.1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson.
Grade Two	CCSS.ELA-LITERACY.RI.2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.	CCSS.ELA-LITERACY.RL.2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.

Literature Links continued

ENGLISH LANGUAGE ARTS	COLUMN A INFORMATION TEXTS	COLUMN B FICTION TEXTS
Grade Three	<p>CCSS.ELA-LITERACY.RI.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.</p>	<p>CCSS.ELA-LITERACY.RL.3.2 Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.</p>
Grade Four	<p>CCSS.ELA-LITERACY.RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.</p>	<p>CCSS.ELA-LITERACY.RL.4.2 Determine a theme of a story, drama, or poem from details in the text; summarize the text.</p>
Grade Five	<p>CCSS.ELA-LITERACY.RI.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.</p>	<p>CCSS.ELA-LITERACY.RL.5.2 Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.</p>
Grade Six	<p>CCSS.ELA-LITERACY.RI.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p>	<p>CCSS.ELA-LITERACY.RL.6.2 Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.</p>
Grade Seven	<p>CCSS.ELA-LITERACY.RI.7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p>	<p>CCSS.ELA-LITERACY.RL.7.2 Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.</p>
Grade Eight	<p>CCSS.ELA-LITERACY.RI.8.1 Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.</p>	<p>CCSS.ELA-LITERACY.RL.8.2 Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.</p>
Grade Band 9-10	<p>CCSS.ELA-LITERACY.RI.9-10.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p>	<p>CCSS.ELA-LITERACY.RL.9-10.2 Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.</p>
Grade Band 11-12	<p>CCSS.ELA-LITERACY.RI.11-12.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.</p>	<p>CCSS.ELA-LITERACY.RL.11-12.2 Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.</p>

Exploring Michigan Greens: Taste Testing

Science

Next Generation Science Standards Crosscutting Concepts

Crosscutting Concept #1 Patterns:

Observed patterns of forms and events guide organization and classification, and they prompt questions about relationships and the factors that influence them.

GRADES	PRACTICE IDENTIFIERS	PRACTICE TEXTS
Grades K-2	NGSS Crosscutting Concept 1: K-2 application	In grades K-2, children recognize that patterns in the natural and human designed world can be observed, used to describe phenomena, and used as evidence.
Grades 3-5	NGSS Crosscutting Concept 1: 3-5 application	In grades 3-5, students identify similarities and differences in order to sort and classify natural objects and designed products. They identify patterns related to time, including simple rates of change and cycles, and use these patterns to make predictions.
Grades 6-8	NGSS Crosscutting Concept 1: 6-8 application	In grades 6-8, students recognize that macroscopic patterns are related to the nature of microscopic and atomic-level structure. They identify patterns in rates of change and other numerical relationships that provide information about natural and human designed systems. They use patterns to identify cause and effect relationships, and use graphs and charts to identify patterns in data.
Grades 9-12	NGSS Crosscutting Concept 1: 9-12 application	In grades 9-12, students observe patterns in systems at different scales and cite patterns as empirical evidence for causality in supporting their explanations of phenomena. They recognize classifications or explanations used at one scale may not be useful or need revision using a different scale; thus requiring improved investigations and experiments.

Student Sleuths Adventurous Activities Home Grown Facts: Activity

English Language Arts

Strand: Writing

Category: Research to Build and Present Knowledge

Anchor Standard #7: CCSS.ELA-LITERACY.CCRA.W.7

Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

GRADES	STANDARD CODES	STANDARD TEXTS
Kindergarten Grade One Grade Two	CCSS.ELA-LITERACY.W.K.7 CCSS.ELA-LITERACY.W.1.7 CCSS.ELA-LITERACY.W.2.7	Participate in shared research and writing projects.
Grade Three	CCSS.ELA-LITERACY.W.3.7	Conduct short research projects that build knowledge about a topic.

Student Sleuths Adventurous Activities, continued

GRADES	STANDARD CODES	STANDARD TEXTS
Grade Four	CCSS.ELA-LITERACY.W.4.7	Conduct short research projects that build knowledge through investigation of different aspects of a topic.
Grade Five	CCSS.ELA-LITERACY.W.5.7	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.
Grade Six	CCSS.ELA-LITERACY.W.6.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.
Grade Seven	CCSS.ELA-LITERACY.W.7.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.
Grade Eight	CCSS.ELA-LITERACY.W.8.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
Grade Band 9-10 Grade Band 11-12	CCSS.ELA-LITERACY.W.9-10.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.

Student Sleuths

Mathematics

K-5 Measurement & Data

6-12 Statistics & Probability

GRADES	STANDARD CODES	STANDARD TEXTS
Kindergarten	CCSS.MATH.CONTENT.K.MD.A.2	Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.
Grade One	CCSS.MATH.CONTENT.1.MD.C.4	Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.
Grade Two	CCSS.MATH.CONTENT.2.MD.D.10	Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems ¹ using information presented in a bar graph.

Student Sleuths, continued

GRADES	STANDARD CODES	STANDARD TEXTS
Grade Three	CCSS.MATH.CONTENT.3.MD.A.2	Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.
Grade Four	CCSS.MATH.CONTENT.4.MD.A.1	Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.
Grade Five	CCSS.MATH.CONTENT.5.MD.A.1	Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.
Grade Six	CCSS.MATH.CONTENT.6.RP.A.1	Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.
Grade Seven	CCSS.MATH.CONTENT.7.RP.A.2	Recognize and represent proportional relationships between quantities.
Grade Eight	CCSS.MATH.CONTENT.8.EE.B.5	Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways.
High School	CCSS.MATH.CONTENT.HSN.Q.A.1	Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.