

# Girl Scouts Journeys

## Content Unit Report

**Grades:** 11, 12

**States:** Michigan Curriculum Standards

### Your Voice, Your World

Summary: YOUR VOICE, YOUR WORLD: THE POWER OF ADVOCACY How often have you seen something that really needed to be changed and wondered, "Why isn't someone doing something about that?" This journey, for eleventh- and twelfth-graders gives Girl Scout Ambassadors a way to be that someone -- an advocate with the power to start the first flutter of real and lasting change. While creating their own "butterfly effect", they'll learn skills -- such as networking, planning, and speaking up for what they believe -- that will prepare them for life beyond high school.

(978-0-88441-719-4)

## Michigan Curriculum Standards

### Health and PE / Language Arts / Mathematics / Science / Social Studies

Grade: **11** - Adopted **2006**

STRAND / STANDARD CATEGORY	MI.1.1.	Writing, Speaking, and Visual Expression: Understand and practice writing as a recursive process.
STANDARD	CE 1.1.1.	Demonstrate flexibility in using independent and collaborative strategies for planning, drafting, revising, and editing complex texts.
STANDARD	CE 1.1.3.	Select and use language that is appropriate (e.g., formal, informal, literary, or technical) for the purpose, audience, and context of the text, speech, or visual representation (e.g., letter to editor, proposal, poem, or digital story).
STANDARD	CE 1.1.5.	Revise drafts to more fully and/or precisely convey meaning - drawing on response from others, self-reflection, and reading one's own work with the eye of a reader; then refine the text - deleting and/or reorganizing ideas, and addressing potential readers' questions.
STRAND / STANDARD CATEGORY	MI.1.3.	Writing, Speaking, and Visual Expression: Communicate in speech, writing, and multimedia using content, form, voice, and style appropriate to the audience and purpose (e.g., to reflect, persuade, inform, analyze, entertain, inspire).
STANDARD	CE 1.3.1.	Compose written, spoken, and/or multimedia compositions in a range of genres (e.g., personal narrative, biography, poem, fiction, drama, creative nonfiction, summary, literary analysis essay, research report, or work-related text): pieces that serve a variety of purposes (e.g., expressive, informative, creative, and persuasive) and that use a variety of organizational patterns (e.g., autobiography, free verse, dialogue, comparison/contrast, definition, or cause and effect).
STANDARD	CE 1.3.3.	Compose essays with well-crafted and varied sentences demonstrating a precise, flexible, and creative use of language.
STANDARD	CE 1.3.7.	

		Participate collaboratively and productively in groups (e.g., response groups, work teams, discussion groups, and committees) - fulfilling roles and responsibilities, posing relevant questions, giving and following instructions, acknowledging and building on ideas and contributions of others to answer questions or to solve problems, and offering dissent courteously.
STANDARD	CE 1.3.8.	Evaluate own and others' effectiveness in group discussions and formal presentations (e.g., considering accuracy, relevance, clarity, and delivery; types of arguments used; and relationships among purpose, audience, and content).
STRAND / STANDARD CATEGORY	MI.1.4.	Writing, Speaking, and Visual Expression: Develop and use the tools and practices of inquiry and research - generating, exploring, and refining important questions; creating a hypothesis or thesis; gathering and studying evidence; drawing conclusions; and composing a report.
STANDARD	CE 1.4.1.	Identify, explore, and refine topics and questions appropriate for research.
STANDARD	CE 1.4.2.	Develop a system for gathering, organizing, paraphrasing, and summarizing information; select, evaluate, synthesize, and use multiple primary and secondary (print and electronic) resources.
STANDARD	CE 1.4.4.	Interpret, synthesize, and evaluate information/findings in various print sources and media (e.g., fact and opinion, comprehensiveness of the evidence, bias, varied perspectives, motives and credibility of the author, date of publication) to draw conclusions and implications.
STANDARD	CE 1.4.7.	Recognize the role of research, including student research, as a contribution to collective knowledge, selecting an appropriate method or genre through which research findings will be shared and evaluated, keeping in mind the needs of the prospective audience. (e.g., presentations, online sharing, written products such as a research report, a research brief, a multi-genre report, I-Search, literary analysis, news article).
STRAND / STANDARD CATEGORY	MI.1.5.	Writing, Speaking, and Visual Expression: Produce a variety of written, spoken, multigenre, and multimedia works, making conscious choices about language, form, style, and/or visual representation for each work (e.g., poetry, fiction and creative nonfiction stories, academic and literary essays, proposals, memos, manifestos, business letters, advertisements, prepared speeches, group and dramatic performances, poetry slams, and digital stories).
STANDARD	CE 1.5.1.	Use writing, speaking, and visual expression to develop powerful, creative and critical messages.
STANDARD	CE 1.5.3.	

		Select format and tone based on the desired effect and audience, using effective written and spoken language, sound, and/or visual representations (e.g., focus, transitions, facts, detail and evidence to support judgments, skillful use of rhetorical devices, and a coherent conclusion).
STRAND / STANDARD CATEGORY	MI.2.1.	Reading, Listening, and Viewing: Develop critical reading, listening, and viewing strategies.
STANDARD	CE 2.1.2.	Make supported inferences and draw conclusions based on informational print and multimedia features (e.g., prefaces, appendices, marginal notes, illustrations, bibliographies, author's pages, footnotes, diagrams, tables, charts, maps, timelines, graphs, and other visual and special effects) and explain how authors and speakers use them to infer the organization of text and enhance understanding, convey meaning, and inspire or mislead audiences.
STANDARD	CE 2.1.3.	Determine the meaning of unfamiliar words, specialized vocabulary, figurative language, idiomatic expressions, and technical meanings of terms through context clues, word roots and affixes, and the use of appropriate resource materials such as print and electronic dictionaries.
STANDARD	CE 2.1.6.	Recognize the defining characteristics of informational texts, speeches, and multimedia presentations (e.g., documentaries and research presentations) and elements of expository texts (e.g., thesis, supporting ideas, and statistical evidence); critically examine the argumentation and conclusions of multiple informational texts.
STANDARD	CE 2.1.10.	Students will Listen to and view speeches, presentations, and multimedia works to identify and respond thoughtfully to key ideas, significant details, logical organization, fact and opinion, and propaganda.
STANDARD	CE 2.1.11.	Students will Demonstrate appropriate social skills of audience, group discussion, or work team behavior by listening attentively and with civility to the ideas of others, gaining the floor in respectful ways, posing appropriate questions, and tolerating ambiguity and lack of consensus.
STANDARD	CE 2.1.12.	Students will Use a variety of strategies to enhance listening comprehension (e.g., monitor message for clarity and understanding, ask relevant questions, provide verbal and nonverbal feedback, notice cues such as change of pace or emphasis that indicate a new point is about to be made; and take notes to organize essential information).
STRAND / STANDARD CATEGORY	MI.2.3.	Reading, Listening, and Viewing: Develop as a reader, listener, and viewer for personal, social, and political purposes, through independent and collaborative reading.

STANDARD	CE 2.3.2.	Read, view, and/or listen independently to a variety of fiction, nonfiction, and multimedia genres based on student interest and curiosity.
STRAND / STANDARD CATEGORY	MI.3.1.	Literature and Culture: Develop the skills of close and contextual literary reading.
STANDARD	CE 3.1.5.	Comparatively analyze two or more literary or expository texts, comparing how and why similar themes are treated differently, by different authors, in different types of text, in different historical periods, and/or from different cultural perspectives.
STRAND / STANDARD CATEGORY	MI.3.2.	Literature and Culture: Read and respond to classic and contemporary fiction, literary nonfiction, and expository text, from a variety of literary genres representing many time periods and authors (e.g., myth, epic, folklore, drama, poetry, autobiography, novels, short stories, philosophical pieces, science fiction, fantasy, young adult literature, creative non-fiction, hypertext fiction).
STANDARD	CE 3.2.4.	Respond by participating actively and appropriately in small and large group discussions about literature (e.g., posing questions, listening to others, contributing ideas, reflecting on and revising initial responses).
STRAND / STANDARD CATEGORY	MI.4.1.	Language: Understand and use the English language effectively in a variety of contexts and settings.
STANDARD	CE 4.1.3.	Use a range of linguistic applications and styles for accomplishing different rhetorical purposes (e.g., persuading others to change opinions, conducting business transactions, speaking in a public forum, discussing issues informally with peers).
STANDARD	CE 4.1.4.	Control standard English structures in a variety of contexts (e.g., formal speaking, academic prose, business, and public writing) using language carefully and precisely.

**Grade: 12 - Adopted 2006**

STRAND / STANDARD CATEGORY	MI.1.1.	Writing, Speaking, and Visual Expression: Understand and practice writing as a recursive process.
STANDARD	CE 1.1.1.	Demonstrate flexibility in using independent and collaborative strategies for planning, drafting, revising, and editing complex texts.
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STANDARD	CE 1.1.5.	Revise drafts to more fully and/or precisely convey meaning - drawing on response from others, self-reflection, and reading one's own work with the eye of a reader; then refine the text - deleting and/or reorganizing ideas, and addressing potential readers'

		questions.
STRAND / STANDARD CATEGORY	MI.1.3.	Writing, Speaking, and Visual Expression: Communicate in speech, writing, and multimedia using content, form, voice, and style appropriate to the audience and purpose (e.g., to reflect, persuade, inform, analyze, entertain, inspire).
STANDARD	CE 1.3.1.	Compose written, spoken, and/or multimedia compositions in a range of genres (e.g., personal narrative, biography, poem, fiction, drama, creative nonfiction, summary, literary analysis essay, research report, or work-related text): pieces that serve a variety of purposes (e.g., expressive, informative, creative, and persuasive) and that use a variety of organizational patterns (e.g., autobiography, free verse, dialogue, comparison/contrast, definition, or cause and effect).
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STANDARD	CE 1.3.7.	Participate collaboratively and productively in groups (e.g., response groups, work teams, discussion groups, and committees) - fulfilling roles and responsibilities, posing relevant questions, giving and following instructions, acknowledging and building on ideas and contributions of others to answer questions or to solve problems, and offering dissent courteously.
STANDARD	CE 1.3.8.	Evaluate own and others' effectiveness in group discussions and formal presentations (e.g., considering accuracy, relevance, clarity, and delivery; types of arguments used; and relationships among purpose, audience, and content).
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STANDARD	CE 1.4.2.	Develop a system for gathering, organizing, paraphrasing, and summarizing information; select, evaluate, synthesize, and use multiple primary and secondary (print and electronic) resources.
STANDARD	CE 1.4.4.	Interpret, synthesize, and evaluate information/findings in various print sources and media (e.g., fact and opinion, comprehensiveness of the evidence, bias, varied perspectives, motives and credibility of the author, date of publication) to draw conclusions and implications.
STANDARD	CE 1.4.7.	Recognize the role of research, including student research, as a contribution to collective knowledge,

		selecting an appropriate method or genre through which research findings will be shared and evaluated, keeping in mind the needs of the prospective audience. (e.g., presentations, online sharing, written products such as a research report, a research brief, a multi-genre report, I-Search, literary analysis, news article).
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STANDARD	CE 2.1.2.	Make supported inferences and draw conclusions based on informational print and multimedia features (e.g., prefaces, appendices, marginal notes, illustrations, bibliographies, author's pages, footnotes, diagrams, tables, charts, maps, timelines, graphs, and other visual and special effects) and explain how authors and speakers use them to infer the organization of text and enhance understanding, convey meaning, and inspire or mislead audiences.
STANDARD	CE 2.1.3.	Determine the meaning of unfamiliar words, specialized vocabulary, figurative language, idiomatic expressions, and technical meanings of terms through context clues, word roots and affixes, and the use of appropriate resource materials such as print and electronic dictionaries.
STANDARD	CE 2.1.6.	Recognize the defining characteristics of informational texts, speeches, and multimedia presentations (e.g., documentaries and research presentations) and elements of expository texts (e.g., thesis, supporting ideas, and statistical evidence); critically examine the argumentation and conclusions of multiple informational texts.
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STANDARD	CE 2.1.11.	Students will Demonstrate appropriate social skills of audience, group discussion, or work team behavior by listening attentively and with civility to the ideas of others, gaining the floor in respectful ways, posing appropriate questions, and tolerating ambiguity and lack of consensus.
STANDARD	CE 2.1.12.	Students will Use a variety of strategies to enhance listening comprehension (e.g., monitor message for clarity and understanding, ask relevant questions, provide verbal and nonverbal feedback, notice cues such as change of pace or emphasis that indicate a new point is about to be made; and take notes to organize essential information).
STRAND / STANDARD CATEGORY	MI.2.3.	Reading, Listening, and Viewing: Develop as a reader, listener, and viewer for personal, social, and political purposes, through independent and collaborative reading.
STANDARD	CE 2.3.2.	Read, view, and/or listen independently to a variety of fiction, nonfiction, and multimedia genres based on student interest and curiosity.
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STANDARD	CE 3.1.5.	Comparatively analyze two or more literary or expository texts, comparing how and why similar themes are treated differently, by different authors, in different types of text, in different historical periods, and/or from different cultural perspectives.
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STANDARD	CE 3.2.4.	Respond by participating actively and appropriately in small and large group discussions about literature (e.g., posing questions, listening to others, contributing ideas, reflecting on and revising initial responses).
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STANDARD	CE 4.1.3.	Use a range of linguistic applications and styles for accomplishing different rhetorical purposes (e.g., persuading others to change opinions, conducting business transactions, speaking in a public forum, discussing issues informally with peers).
STANDARD	CE 4.1.4.	Control standard English structures in a variety of contexts (e.g., formal speaking, academic prose,

business, and public writing) using language carefully and precisely.

Grade: **11** - Adopted **2007**

<b>STRAND / STANDARD CATEGORY</b>	<b>MI.L.</b>	<b>Quantitative Literacy and Logic (L)</b>
STANDARD	L1:	Reasoning About Numbers, Systems, and Quantitative Situations: Based on their knowledge of the properties of arithmetic, students understand and reason about numbers, number systems, and the relationships between them. They represent quantitative relationships using mathematical symbols, and interpret relationships from those representations.
GRADE LEVEL EXPECTATION	L1.2	Representations and Relationships
EXPECTATION	L1.2.4	Organize and summarize a data set in a table, plot, chart, or spreadsheet; find patterns in a display of data; understand and critique data displays in the media.
<b>STRAND / STANDARD CATEGORY</b>	<b>MI.S.</b>	<b>Statistics and Probability (S)</b>
STANDARD	S2:	Bivariate Data - Examining Relationships: Students plot and interpret bivariate data by constructing scatterplots, recognizing linear and nonlinear patterns, and interpreting correlation coefficients; they fit and interpret regression models, using technology as appropriate.
GRADE LEVEL EXPECTATION	S2.1	Scatterplots and Correlation
EXPECTATION	S2.1.2	Given a scatterplot, identify patterns, clusters, and outliers. Recognize no correlation, weak correlation, and strong correlation.
<b>STRAND / STANDARD CATEGORY</b>	<b>MI.AI.</b>	<b>Algebra I</b>
STANDARD	L1:	Reasoning About Numbers, Systems, and Quantitative Situations
GRADE LEVEL EXPECTATION	L1.2.	Representations and Relationships
EXPECTATION	L1.2.4.	Organize and summarize a data set in a table, plot, chart, or spreadsheet; find patterns in a display of data; understand and critique data displays in the media.
<b>STRAND / STANDARD CATEGORY</b>	<b>MI.AI.</b>	<b>Algebra I</b>
STANDARD	S2:	Bivariate Data-Examining Relationships
GRADE LEVEL EXPECTATION	S2.1.	Scatter plots and Correlation
EXPECTATION	S2.1.2.	Given a scatter plot, identify patterns, clusters, and outliers. Recognize no correlation, weak correlation, and strong correlation.

Grade: **12** - Adopted **2007**

<b>STRAND / STANDARD CATEGORY</b>	<b>MI.L.</b>	<b>Quantitative Literacy and Logic (L)</b>
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STANDARD	L1:	Reasoning About Numbers, Systems, and Quantitative Situations: Based on their knowledge of the properties of arithmetic, students understand and reason about numbers, number systems, and the relationships between them. They represent quantitative relationships using mathematical symbols, and interpret relationships from those representations.
GRADE LEVEL EXPECTATION	L1.2	Representations and Relationships
EXPECTATION	L1.2.4	Organize and summarize a data set in a table, plot, chart, or spreadsheet; find patterns in a display of data; understand and critique data displays in the media.
<b>STRAND / STANDARD CATEGORY</b>	<b>MI.S.</b>	<b>Statistics and Probability (S)</b>
STANDARD	S2:	Bivariate Data - Examining Relationships: Students plot and interpret bivariate data by constructing scatterplots, recognizing linear and nonlinear patterns, and interpreting correlation coefficients; they fit and interpret regression models, using technology as appropriate.
GRADE LEVEL EXPECTATION	S2.1	Scatterplots and Correlation
EXPECTATION	S2.1.2	Given a scatterplot, identify patterns, clusters, and outliers. Recognize no correlation, weak correlation, and strong correlation.
<b>STRAND / STANDARD CATEGORY</b>	<b>MI.AI.</b>	<b>Algebra I</b>
STANDARD	L1:	Reasoning About Numbers, Systems, and Quantitative Situations
GRADE LEVEL EXPECTATION	L1.2.	Representations and Relationships
EXPECTATION	L1.2.4.	Organize and summarize a data set in a table, plot, chart, or spreadsheet; find patterns in a display of data; understand and critique data displays in the media.
<b>STRAND / STANDARD CATEGORY</b>	<b>MI.AI.</b>	<b>Algebra I</b>
STANDARD	S2:	Bivariate Data-Examining Relationships
GRADE LEVEL EXPECTATION	S2.1.	Scatter plots and Correlation
EXPECTATION	S2.1.2.	Given a scatter plot, identify patterns, clusters, and outliers. Recognize no correlation, weak correlation, and strong correlation.

**Grade: 11 - Adopted 2006**

<b>STRAND / STANDARD CATEGORY</b>	<b>MI.B1.</b>	<b>Biology: Inquiry, Reflection, and Social Implications:</b> Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to,
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		experimentation.
STANDARD	B1.1.	Scientific Inquiry
GRADE LEVEL EXPECTATION	B1.1B.	Evaluate the uncertainties or validity of scientific conclusions using an understanding of sources of measurement error, the challenges of controlling variables, accuracy of data analysis, logic of argument, logic of experimental design, and/or the dependence on underlying assumptions.
STRAND / STANDARD CATEGORY	MI.B1.	Biology: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to, experimentation.
STANDARD	B1.2.	Scientific Reflection and Social Implications
GRADE LEVEL EXPECTATION	B1.2B.	Identify and critique arguments about personal or societal issues based on scientific evidence.
GRADE LEVEL EXPECTATION	B1.2D.	Evaluate scientific explanations in a peer review process or discussion format.
GRADE LEVEL EXPECTATION	B1.2g.	Identify scientific tradeoffs in design decisions and choose among alternative solutions.
GRADE LEVEL EXPECTATION	B1.2h.	Describe the distinctions between scientific theories, laws, hypotheses, and observations.
STRAND / STANDARD CATEGORY	MI.C1.	Chemistry: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to, experimentation.
STANDARD	C1.1.	Scientific Inquiry
GRADE LEVEL EXPECTATION	C1.1B.	Evaluate the uncertainties or validity of scientific conclusions using an understanding of sources of measurement error, the challenges of controlling variables, accuracy of data analysis, logic of argument, logic of experimental design, and/or the dependence on underlying assumptions.
STRAND / STANDARD CATEGORY	MI.E1.	Earth Science: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that

		scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to, experimentation.
STANDARD	E1.1.	Scientific Inquiry
GRADE LEVEL EXPECTATION	E1.1B.	Evaluate the uncertainties or validity of scientific conclusions using an understanding of sources of measurement error, the challenges of controlling variables, accuracy of data analysis, logic of argument, logic of experimental design, and/or the dependence on underlying assumptions.
GRADE LEVEL EXPECTATION	E1.1f.	Predict what would happen if the variables, methods, or timing of an investigation were changed.
STRAND / STANDARD CATEGORY	MI.P1.	Physics: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to, experimentation.
STANDARD	P1.1.	Scientific Inquiry
GRADE LEVEL EXPECTATION	P1.1B.	Evaluate the uncertainties or validity of scientific conclusions using an understanding of sources of measurement error, the challenges of controlling variables, accuracy of data analysis, logic of argument, logic of experimental design, and/or the dependence on underlying assumptions.

Grade: 12 - Adopted 2006

STRAND / STANDARD CATEGORY	MI.B1.	Biology: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to, experimentation.
STANDARD	B1.1.	Scientific Inquiry
GRADE LEVEL EXPECTATION	B1.1B.	Evaluate the uncertainties or validity of scientific conclusions using an understanding of sources of measurement error, the challenges of controlling variables, accuracy of data analysis, logic of argument, logic of experimental design, and/or the dependence on underlying assumptions.
STRAND / STANDARD CATEGORY	MI.B1.	Biology: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and

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STANDARD	B1.2.	Scientific Reflection and Social Implications
GRADE LEVEL EXPECTATION	B1.2B.	Identify and critique arguments about personal or societal issues based on scientific evidence.
GRADE LEVEL EXPECTATION	B1.2D.	Evaluate scientific explanations in a peer review process or discussion format.
GRADE LEVEL EXPECTATION	B1.2g.	Identify scientific tradeoffs in design decisions and choose among alternative solutions.
GRADE LEVEL EXPECTATION	B1.2h.	Describe the distinctions between scientific theories, laws, hypotheses, and observations.
STRAND / STANDARD CATEGORY	MI.C1.	Chemistry: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to, experimentation.
STANDARD	C1.1.	Scientific Inquiry
GRADE LEVEL EXPECTATION	C1.1B.	Evaluate the uncertainties or validity of scientific conclusions using an understanding of sources of measurement error, the challenges of controlling variables, accuracy of data analysis, logic of argument, logic of experimental design, and/or the dependence on underlying assumptions.
STRAND / STANDARD CATEGORY	MI.E1.	Earth Science: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to, experimentation.
STANDARD	E1.1.	Scientific Inquiry
GRADE LEVEL EXPECTATION	E1.1B.	Evaluate the uncertainties or validity of scientific conclusions using an understanding of sources of measurement error, the challenges of controlling variables, accuracy of data analysis, logic of argument, logic of experimental design, and/or the

		dependence on underlying assumptions.
GRADE LEVEL EXPECTATION	E1.1f.	Predict what would happen if the variables, methods, or timing of an investigation were changed.
STRAND / STANDARD CATEGORY	MI.P1.	Physics: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to, experimentation.
STANDARD	P1.1.	Scientific Inquiry
GRADE LEVEL EXPECTATION	P1.1B.	Evaluate the uncertainties or validity of scientific conclusions using an understanding of sources of measurement error, the challenges of controlling variables, accuracy of data analysis, logic of argument, logic of experimental design, and/or the dependence on underlying assumptions.

Your Voice, Your World -

Summary: YOUR VOICE, YOUR WORLD: A HOW-TO GUIDE FOR ADULT VOLUNTEERS (978-0-88441-720-0)

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### Health and PE / Language Arts / Mathematics / Science / Social Studies

Grade: 11 - Adopted 2006

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		Compose written, spoken, and/or multimedia compositions in a range of genres (e.g., personal narrative, biography, poem, fiction, drama, creative nonfiction, summary, literary analysis essay, research report, or work-related text): pieces that serve a variety of purposes (e.g., expressive, informative, creative, and persuasive) and that use a variety of organizational patterns (e.g., autobiography, free verse, dialogue, comparison/contrast, definition, or cause and effect).
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STANDARD	CE 1.3.7.	Participate collaboratively and productively in groups (e.g., response groups, work teams, discussion groups, and committees) - fulfilling roles and responsibilities, posing relevant questions, giving and following instructions, acknowledging and building on ideas and contributions of others to answer questions or to solve problems, and offering dissent courteously.
STANDARD	CE 1.3.8.	Evaluate own and others' effectiveness in group discussions and formal presentations (e.g., considering accuracy, relevance, clarity, and delivery; types of arguments used; and relationships among purpose, audience, and content).
STRAND / STANDARD CATEGORY	MI.1.4.	Writing, Speaking, and Visual Expression: Develop and use the tools and practices of inquiry and research - generating, exploring, and refining important questions; creating a hypothesis or thesis; gathering and studying evidence; drawing conclusions; and composing a report.
STANDARD	CE 1.4.1.	Identify, explore, and refine topics and questions appropriate for research.
STANDARD	CE 1.4.2.	Develop a system for gathering, organizing, paraphrasing, and summarizing information; select, evaluate, synthesize, and use multiple primary and secondary (print and electronic) resources.
STANDARD	CE 1.4.4.	Interpret, synthesize, and evaluate information/findings in various print sources and media (e.g., fact and opinion, comprehensiveness of the evidence, bias, varied perspectives, motives and credibility of the author, date of publication) to draw conclusions and implications.
STANDARD	CE 1.4.7.	Recognize the role of research, including student research, as a contribution to collective knowledge, selecting an appropriate method or genre through which research findings will be shared and evaluated, keeping in mind the needs of the prospective audience. (e.g., presentations, online sharing, written products such as a research report, a research brief, a multi-genre report, I-Search, literary analysis, news article).

STRAND / STANDARD CATEGORY	MI.1.5.	Writing, Speaking, and Visual Expression: Produce a variety of written, spoken, multigenre, and multimedia works, making conscious choices about language, form, style, and/or visual representation for each work (e.g., poetry, fiction and creative nonfiction stories, academic and literary essays, proposals, memos, manifestos, business letters, advertisements, prepared speeches, group and dramatic performances, poetry slams, and digital stories).
STANDARD	CE 1.5.1.	Use writing, speaking, and visual expression to develop powerful, creative and critical messages.
STANDARD	CE 1.5.3.	Select format and tone based on the desired effect and audience, using effective written and spoken language, sound, and/or visual representations (e.g., focus, transitions, facts, detail and evidence to support judgments, skillful use of rhetorical devices, and a coherent conclusion).
STRAND / STANDARD CATEGORY	MI.2.1.	Reading, Listening, and Viewing: Develop critical reading, listening, and viewing strategies.
STANDARD	CE 2.1.2.	Make supported inferences and draw conclusions based on informational print and multimedia features (e.g., prefaces, appendices, marginal notes, illustrations, bibliographies, author's pages, footnotes, diagrams, tables, charts, maps, timelines, graphs, and other visual and special effects) and explain how authors and speakers use them to infer the organization of text and enhance understanding, convey meaning, and inspire or mislead audiences.
STANDARD	CE 2.1.3.	Determine the meaning of unfamiliar words, specialized vocabulary, figurative language, idiomatic expressions, and technical meanings of terms through context clues, word roots and affixes, and the use of appropriate resource materials such as print and electronic dictionaries.
STANDARD	CE 2.1.6.	Recognize the defining characteristics of informational texts, speeches, and multimedia presentations (e.g., documentaries and research presentations) and elements of expository texts (e.g., thesis, supporting ideas, and statistical evidence); critically examine the argumentation and conclusions of multiple informational texts.
STANDARD	CE 2.1.10.	Students will Listen to and view speeches, presentations, and multimedia works to identify and respond thoughtfully to key ideas, significant details, logical organization, fact and opinion, and propaganda.
STANDARD	CE 2.1.11.	Students will Demonstrate appropriate social skills of audience, group discussion, or work team behavior by listening attentively and with civility to the ideas of others, gaining the floor in respectful ways, posing appropriate questions, and tolerating ambiguity and lack of consensus.

STANDARD	CE 2.1.12.	Students will Use a variety of strategies to enhance listening comprehension (e.g., monitor message for clarity and understanding, ask relevant questions, provide verbal and nonverbal feedback, notice cues such as change of pace or emphasis that indicate a new point is about to be made; and take notes to organize essential information).
STRAND / STANDARD CATEGORY	MI.2.3.	Reading, Listening, and Viewing: Develop as a reader, listener, and viewer for personal, social, and political purposes, through independent and collaborative reading.
STANDARD	CE 2.3.2.	Read, view, and/or listen independently to a variety of fiction, nonfiction, and multimedia genres based on student interest and curiosity.
STRAND / STANDARD CATEGORY	MI.3.1.	Literature and Culture: Develop the skills of close and contextual literary reading.
STANDARD	CE 3.1.5.	Comparatively analyze two or more literary or expository texts, comparing how and why similar themes are treated differently, by different authors, in different types of text, in different historical periods, and/or from different cultural perspectives.
STRAND / STANDARD CATEGORY	MI.3.2.	Literature and Culture: Read and respond to classic and contemporary fiction, literary nonfiction, and expository text, from a variety of literary genres representing many time periods and authors (e.g., myth, epic, folklore, drama, poetry, autobiography, novels, short stories, philosophical pieces, science fiction, fantasy, young adult literature, creative non-fiction, hypertext fiction).
STANDARD	CE 3.2.4.	Respond by participating actively and appropriately in small and large group discussions about literature (e.g., posing questions, listening to others, contributing ideas, reflecting on and revising initial responses).
STRAND / STANDARD CATEGORY	MI.4.1.	Language: Understand and use the English language effectively in a variety of contexts and settings.
STANDARD	CE 4.1.3.	Use a range of linguistic applications and styles for accomplishing different rhetorical purposes (e.g., persuading others to change opinions, conducting business transactions, speaking in a public forum, discussing issues informally with peers).
STANDARD	CE 4.1.4.	Control standard English structures in a variety of contexts (e.g., formal speaking, academic prose, business, and public writing) using language carefully and precisely.

**Grade: 12 - Adopted 2006**

STRAND / STANDARD CATEGORY	MI.1.1.	Writing, Speaking, and Visual Expression: Understand and practice writing as a recursive process.
STANDARD	CE 1.1.1.	Demonstrate flexibility in using independent and collaborative strategies for planning, drafting,

		revising, and editing complex texts.
STANDARD	CE 1.1.3.	Select and use language that is appropriate (e.g., formal, informal, literary, or technical) for the purpose, audience, and context of the text, speech, or visual representation (e.g., letter to editor, proposal, poem, or digital story).
STANDARD	CE 1.1.5.	Revise drafts to more fully and/or precisely convey meaning - drawing on response from others, self-reflection, and reading one's own work with the eye of a reader; then refine the text - deleting and/or reorganizing ideas, and addressing potential readers' questions.
STRAND / STANDARD CATEGORY	MI.1.3.	Writing, Speaking, and Visual Expression: Communicate in speech, writing, and multimedia using content, form, voice, and style appropriate to the audience and purpose (e.g., to reflect, persuade, inform, analyze, entertain, inspire).
STANDARD	CE 1.3.1.	Compose written, spoken, and/or multimedia compositions in a range of genres (e.g., personal narrative, biography, poem, fiction, drama, creative nonfiction, summary, literary analysis essay, research report, or work-related text): pieces that serve a variety of purposes (e.g., expressive, informative, creative, and persuasive) and that use a variety of organizational patterns (e.g., autobiography, free verse, dialogue, comparison/contrast, definition, or cause and effect).
STANDARD	CE 1.3.3.	Compose essays with well-crafted and varied sentences demonstrating a precise, flexible, and creative use of language.
STANDARD	CE 1.3.7.	Participate collaboratively and productively in groups (e.g., response groups, work teams, discussion groups, and committees) - fulfilling roles and responsibilities, posing relevant questions, giving and following instructions, acknowledging and building on ideas and contributions of others to answer questions or to solve problems, and offering dissent courteously.
STANDARD	CE 1.3.8.	Evaluate own and others' effectiveness in group discussions and formal presentations (e.g., considering accuracy, relevance, clarity, and delivery; types of arguments used; and relationships among purpose, audience, and content).
STRAND / STANDARD CATEGORY	MI.1.4.	Writing, Speaking, and Visual Expression: Develop and use the tools and practices of inquiry and research - generating, exploring, and refining important questions; creating a hypothesis or thesis; gathering and studying evidence; drawing conclusions; and composing a report.
STANDARD	CE 1.4.1.	Identify, explore, and refine topics and questions appropriate for research.
STANDARD	CE 1.4.2.	

		Develop a system for gathering, organizing, paraphrasing, and summarizing information; select, evaluate, synthesize, and use multiple primary and secondary (print and electronic) resources.
STANDARD	CE 1.4.4.	Interpret, synthesize, and evaluate information/findings in various print sources and media (e.g., fact and opinion, comprehensiveness of the evidence, bias, varied perspectives, motives and credibility of the author, date of publication) to draw conclusions and implications.
STANDARD	CE 1.4.7.	Recognize the role of research, including student research, as a contribution to collective knowledge, selecting an appropriate method or genre through which research findings will be shared and evaluated, keeping in mind the needs of the prospective audience. (e.g., presentations, online sharing, written products such as a research report, a research brief, a multi-genre report, I-Search, literary analysis, news article).
STRAND / STANDARD CATEGORY	MI.1.5.	Writing, Speaking, and Visual Expression: Produce a variety of written, spoken, multigenre, and multimedia works, making conscious choices about language, form, style, and/or visual representation for each work (e.g., poetry, fiction and creative nonfiction stories, academic and literary essays, proposals, memos, manifestos, business letters, advertisements, prepared speeches, group and dramatic performances, poetry slams, and digital stories).
STANDARD	CE 1.5.1.	Use writing, speaking, and visual expression to develop powerful, creative and critical messages.
STANDARD	CE 1.5.3.	Select format and tone based on the desired effect and audience, using effective written and spoken language, sound, and/or visual representations (e.g., focus, transitions, facts, detail and evidence to support judgments, skillful use of rhetorical devices, and a coherent conclusion).
STRAND / STANDARD CATEGORY	MI.2.1.	Reading, Listening, and Viewing: Develop critical reading, listening, and viewing strategies.
STANDARD	CE 2.1.2.	Make supported inferences and draw conclusions based on informational print and multimedia features (e.g., prefaces, appendices, marginal notes, illustrations, bibliographies, author's pages, footnotes, diagrams, tables, charts, maps, timelines, graphs, and other visual and special effects) and explain how authors and speakers use them to infer the organization of text and enhance understanding, convey meaning, and inspire or mislead audiences.
STANDARD	CE 2.1.3.	Determine the meaning of unfamiliar words, specialized vocabulary, figurative language, idiomatic expressions, and technical meanings of terms through context clues, word roots and affixes, and the use of appropriate resource materials such as print and

		electronic dictionaries.
STANDARD	CE 2.1.6.	Recognize the defining characteristics of informational texts, speeches, and multimedia presentations (e.g., documentaries and research presentations) and elements of expository texts (e.g., thesis, supporting ideas, and statistical evidence); critically examine the argumentation and conclusions of multiple informational texts.
STANDARD	CE 2.1.10.	Students will Listen to and view speeches, presentations, and multimedia works to identify and respond thoughtfully to key ideas, significant details, logical organization, fact and opinion, and propaganda.
STANDARD	CE 2.1.11.	Students will Demonstrate appropriate social skills of audience, group discussion, or work team behavior by listening attentively and with civility to the ideas of others, gaining the floor in respectful ways, posing appropriate questions, and tolerating ambiguity and lack of consensus.
STANDARD	CE 2.1.12.	Students will Use a variety of strategies to enhance listening comprehension (e.g., monitor message for clarity and understanding, ask relevant questions, provide verbal and nonverbal feedback, notice cues such as change of pace or emphasis that indicate a new point is about to be made; and take notes to organize essential information).
STRAND / STANDARD CATEGORY	MI.2.3.	Reading, Listening, and Viewing: Develop as a reader, listener, and viewer for personal, social, and political purposes, through independent and collaborative reading.
STANDARD	CE 2.3.2.	Read, view, and/or listen independently to a variety of fiction, nonfiction, and multimedia genres based on student interest and curiosity.
STRAND / STANDARD CATEGORY	MI.3.1.	Literature and Culture: Develop the skills of close and contextual literary reading.
STANDARD	CE 3.1.5.	Comparatively analyze two or more literary or expository texts, comparing how and why similar themes are treated differently, by different authors, in different types of text, in different historical periods, and/or from different cultural perspectives.
STRAND / STANDARD CATEGORY	MI.3.2.	Literature and Culture: Read and respond to classic and contemporary fiction, literary nonfiction, and expository text, from a variety of literary genres representing many time periods and authors (e.g., myth, epic, folklore, drama, poetry, autobiography, novels, short stories, philosophical pieces, science fiction, fantasy, young adult literature, creative non-fiction, hypertext fiction).
STANDARD	CE 3.2.4.	Respond by participating actively and appropriately in small and large group discussions about literature (e.g., posing questions, listening to others,

		contributing ideas, reflecting on and revising initial responses).
STRAND / STANDARD CATEGORY	MI.4.1.	Language: Understand and use the English language effectively in a variety of contexts and settings.
STANDARD	CE 4.1.3.	Use a range of linguistic applications and styles for accomplishing different rhetorical purposes (e.g., persuading others to change opinions, conducting business transactions, speaking in a public forum, discussing issues informally with peers).
STANDARD	CE 4.1.4.	Control standard English structures in a variety of contexts (e.g., formal speaking, academic prose, business, and public writing) using language carefully and precisely.

**Grade: 11 - Adopted 2007**

STRAND / STANDARD CATEGORY	MI.L.	Quantitative Literacy and Logic (L)
STANDARD	L1:	Reasoning About Numbers, Systems, and Quantitative Situations: Based on their knowledge of the properties of arithmetic, students understand and reason about numbers, number systems, and the relationships between them. They represent quantitative relationships using mathematical symbols, and interpret relationships from those representations.
GRADE LEVEL EXPECTATION	L1.2	Representations and Relationships
EXPECTATION	L1.2.4	Organize and summarize a data set in a table, plot, chart, or spreadsheet; find patterns in a display of data; understand and critique data displays in the media.
STRAND / STANDARD CATEGORY	MI.S.	Statistics and Probability (S)
STANDARD	S2:	Bivariate Data - Examining Relationships: Students plot and interpret bivariate data by constructing scatterplots, recognizing linear and nonlinear patterns, and interpreting correlation coefficients; they fit and interpret regression models, using technology as appropriate.
GRADE LEVEL EXPECTATION	S2.1	Scatterplots and Correlation
EXPECTATION	S2.1.2	Given a scatterplot, identify patterns, clusters, and outliers. Recognize no correlation, weak correlation, and strong correlation.
STRAND / STANDARD CATEGORY	MI.AI.	Algebra I
STANDARD	L1:	Reasoning About Numbers, Systems, and Quantitative Situations
GRADE LEVEL EXPECTATION	L1.2.	Representations and Relationships
EXPECTATION	L1.2.4.	Organize and summarize a data set in a table, plot, chart, or spreadsheet; find patterns in a display of data; understand and critique data displays in the media.
	MI.AI.	Algebra I

STRAND / STANDARD CATEGORY		
STANDARD	S2:	Bivariate Data-Examining Relationships
GRADE LEVEL EXPECTATION	S2.1.	Scatter plots and Correlation
EXPECTATION	S2.1.2.	Given a scatter plot, identify patterns, clusters, and outliers. Recognize no correlation, weak correlation, and strong correlation.

**Grade: 12 - Adopted 2007**

STRAND / STANDARD CATEGORY		
	MI.L.	Quantitative Literacy and Logic (L)
STANDARD	L1:	Reasoning About Numbers, Systems, and Quantitative Situations: Based on their knowledge of the properties of arithmetic, students understand and reason about numbers, number systems, and the relationships between them. They represent quantitative relationships using mathematical symbols, and interpret relationships from those representations.
GRADE LEVEL EXPECTATION	L1.2	Representations and Relationships
EXPECTATION	L1.2.4	Organize and summarize a data set in a table, plot, chart, or spreadsheet; find patterns in a display of data; understand and critique data displays in the media.

STRAND / STANDARD CATEGORY		
	MI.S.	Statistics and Probability (S)
STANDARD	S2:	Bivariate Data - Examining Relationships: Students plot and interpret bivariate data by constructing scatterplots, recognizing linear and nonlinear patterns, and interpreting correlation coefficients; they fit and interpret regression models, using technology as appropriate.
GRADE LEVEL EXPECTATION	S2.1	Scatterplots and Correlation
EXPECTATION	S2.1.2	Given a scatterplot, identify patterns, clusters, and outliers. Recognize no correlation, weak correlation, and strong correlation.

STRAND / STANDARD CATEGORY		
	MI.AI.	Algebra I
STANDARD	L1:	Reasoning About Numbers, Systems, and Quantitative Situations
GRADE LEVEL EXPECTATION	L1.2.	Representations and Relationships
EXPECTATION	L1.2.4.	Organize and summarize a data set in a table, plot, chart, or spreadsheet; find patterns in a display of data; understand and critique data displays in the media.

STRAND / STANDARD CATEGORY		
	MI.AI.	Algebra I
STANDARD	S2:	Bivariate Data-Examining Relationships
GRADE LEVEL EXPECTATION	S2.1.	Scatter plots and Correlation
EXPECTATION	S2.1.2.	Given a scatter plot, identify patterns, clusters, and

outliers. Recognize no correlation, weak correlation, and strong correlation.

Grade: **11** - Adopted **2006**

STRAND / STANDARD CATEGORY	MI.B1.	Biology: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to, experimentation.
STANDARD	B1.1.	Scientific Inquiry
GRADE LEVEL EXPECTATION	B1.1B.	Evaluate the uncertainties or validity of scientific conclusions using an understanding of sources of measurement error, the challenges of controlling variables, accuracy of data analysis, logic of argument, logic of experimental design, and/or the dependence on underlying assumptions.
STRAND / STANDARD CATEGORY	MI.B1.	Biology: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to, experimentation.
STANDARD	B1.2.	Scientific Reflection and Social Implications
GRADE LEVEL EXPECTATION	B1.2B.	Identify and critique arguments about personal or societal issues based on scientific evidence.
GRADE LEVEL EXPECTATION	B1.2D.	Evaluate scientific explanations in a peer review process or discussion format.
GRADE LEVEL EXPECTATION	B1.2g.	Identify scientific tradeoffs in design decisions and choose among alternative solutions.
GRADE LEVEL EXPECTATION	B1.2h.	Describe the distinctions between scientific theories, laws, hypotheses, and observations.
STRAND / STANDARD CATEGORY	MI.C1.	Chemistry: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to, experimentation.
STANDARD	C1.1.	Scientific Inquiry

GRADE LEVEL EXPECTATION	C1.1B.	Evaluate the uncertainties or validity of scientific conclusions using an understanding of sources of measurement error, the challenges of controlling variables, accuracy of data analysis, logic of argument, logic of experimental design, and/or the dependence on underlying assumptions.
STRAND / STANDARD CATEGORY	MI.E1.	Earth Science: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to, experimentation.
STANDARD	E1.1.	Scientific Inquiry
GRADE LEVEL EXPECTATION	E1.1B.	Evaluate the uncertainties or validity of scientific conclusions using an understanding of sources of measurement error, the challenges of controlling variables, accuracy of data analysis, logic of argument, logic of experimental design, and/or the dependence on underlying assumptions.
GRADE LEVEL EXPECTATION	E1.1f.	Predict what would happen if the variables, methods, or timing of an investigation were changed.
STRAND / STANDARD CATEGORY	MI.P1.	Physics: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to, experimentation.
STANDARD	P1.1.	Scientific Inquiry
GRADE LEVEL EXPECTATION	P1.1B.	Evaluate the uncertainties or validity of scientific conclusions using an understanding of sources of measurement error, the challenges of controlling variables, accuracy of data analysis, logic of argument, logic of experimental design, and/or the dependence on underlying assumptions.

**Grade: 12 - Adopted 2006**

STRAND / STANDARD CATEGORY	MI.B1.	Biology: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by
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		methods including, but not limited to, experimentation.
STANDARD	B1.1.	Scientific Inquiry
GRADE LEVEL EXPECTATION	B1.1B.	Evaluate the uncertainties or validity of scientific conclusions using an understanding of sources of measurement error, the challenges of controlling variables, accuracy of data analysis, logic of argument, logic of experimental design, and/or the dependence on underlying assumptions.
STRAND / STANDARD CATEGORY	MI.B1.	Biology: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to, experimentation.
STANDARD	B1.2.	Scientific Reflection and Social Implications
GRADE LEVEL EXPECTATION	B1.2B.	Identify and critique arguments about personal or societal issues based on scientific evidence.
GRADE LEVEL EXPECTATION	B1.2D.	Evaluate scientific explanations in a peer review process or discussion format.
GRADE LEVEL EXPECTATION	B1.2g.	Identify scientific tradeoffs in design decisions and choose among alternative solutions.
GRADE LEVEL EXPECTATION	B1.2h.	Describe the distinctions between scientific theories, laws, hypotheses, and observations.
STRAND / STANDARD CATEGORY	MI.C1.	Chemistry: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to, experimentation.
STANDARD	C1.1.	Scientific Inquiry
GRADE LEVEL EXPECTATION	C1.1B.	Evaluate the uncertainties or validity of scientific conclusions using an understanding of sources of measurement error, the challenges of controlling variables, accuracy of data analysis, logic of argument, logic of experimental design, and/or the dependence on underlying assumptions.
STRAND / STANDARD CATEGORY	MI.E1.	Earth Science: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations.

		Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to, experimentation.
STANDARD	E1.1.	Scientific Inquiry
GRADE LEVEL EXPECTATION	E1.1B.	Evaluate the uncertainties or validity of scientific conclusions using an understanding of sources of measurement error, the challenges of controlling variables, accuracy of data analysis, logic of argument, logic of experimental design, and/or the dependence on underlying assumptions.
GRADE LEVEL EXPECTATION	E1.1f.	Predict what would happen if the variables, methods, or timing of an investigation were changed.
STRAND / STANDARD CATEGORY	MI.P1.	Physics: Inquiry, Reflection, and Social Implications: Students will understand the nature of science and demonstrate an ability to practice scientific reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and the testing of this information by methods including, but not limited to, experimentation.
STANDARD	P1.1.	Scientific Inquiry
GRADE LEVEL EXPECTATION	P1.1B.	Evaluate the uncertainties or validity of scientific conclusions using an understanding of sources of measurement error, the challenges of controlling variables, accuracy of data analysis, logic of argument, logic of experimental design, and/or the dependence on underlying assumptions.

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