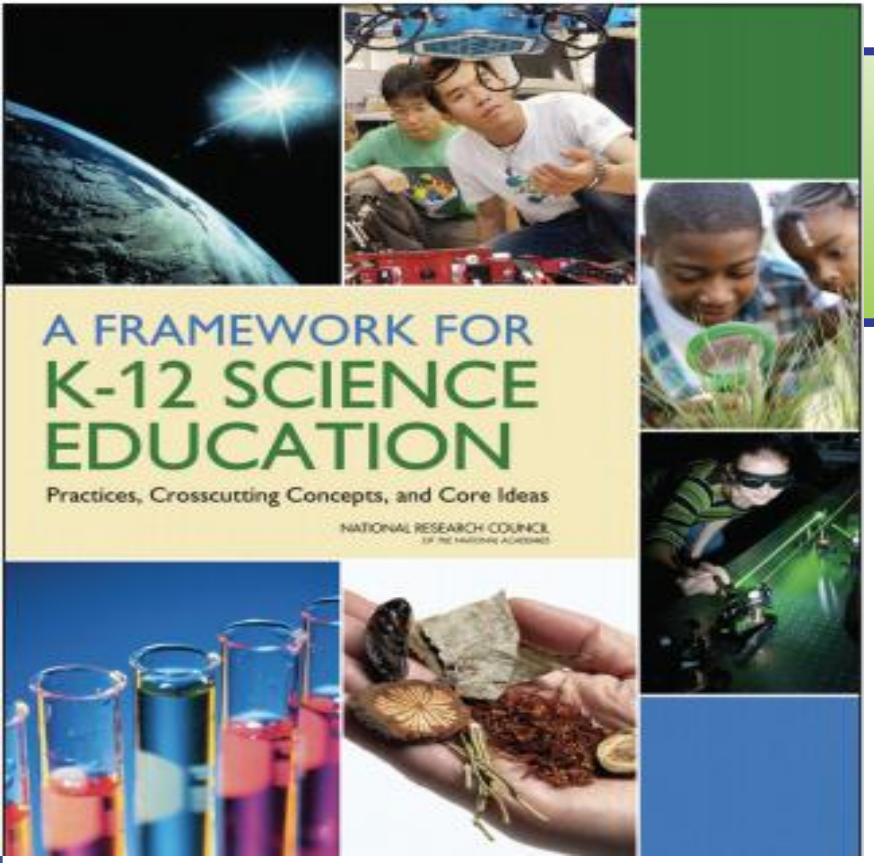
NEXT GENERATION SCIENCE STANDARDS

For States, By States

Career and College Readiness in Terms of Next Generation Science Standards (NGSS)



Michigan –
An NGSS Lead State Partner

NEXT GENERATION SCIENCE STANDARDS
For States, By States

Next Generation Science Standards for Today's Students and Tomorrow's Workforce

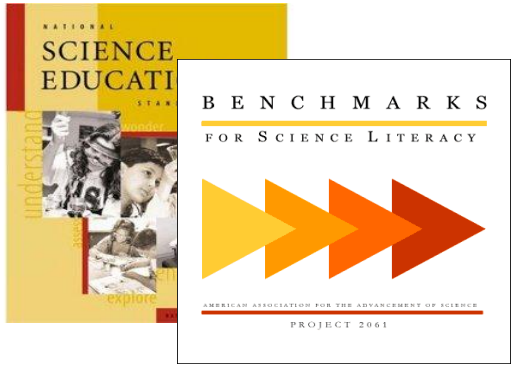
MICHIGAN SCIENCE TEACHERS ASSOCIATION

Michigan Mathematics and Science Centers Network

MICHIGAN STEM PARTNERSHIP

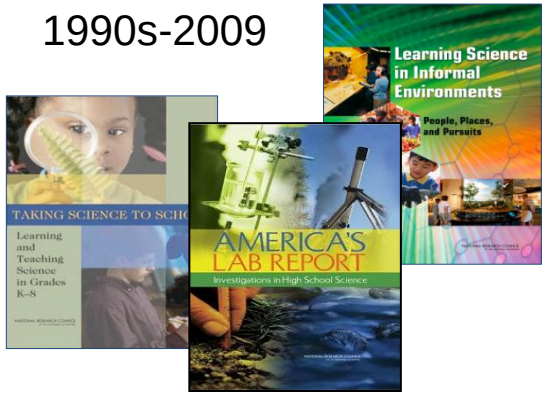
MICHIGAN Department of Education

Building on the Past; Preparing for the Future

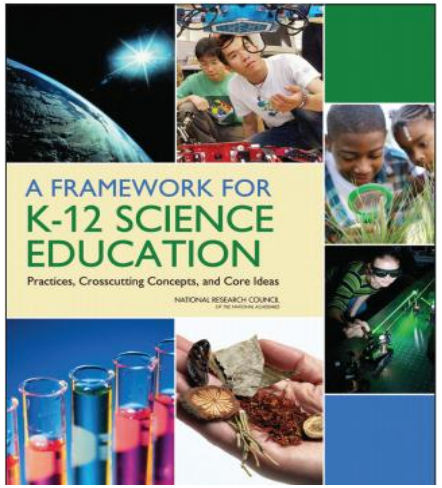


1990s

1990s-2009



Phase I



1/2010 - 7/2011

Phase II

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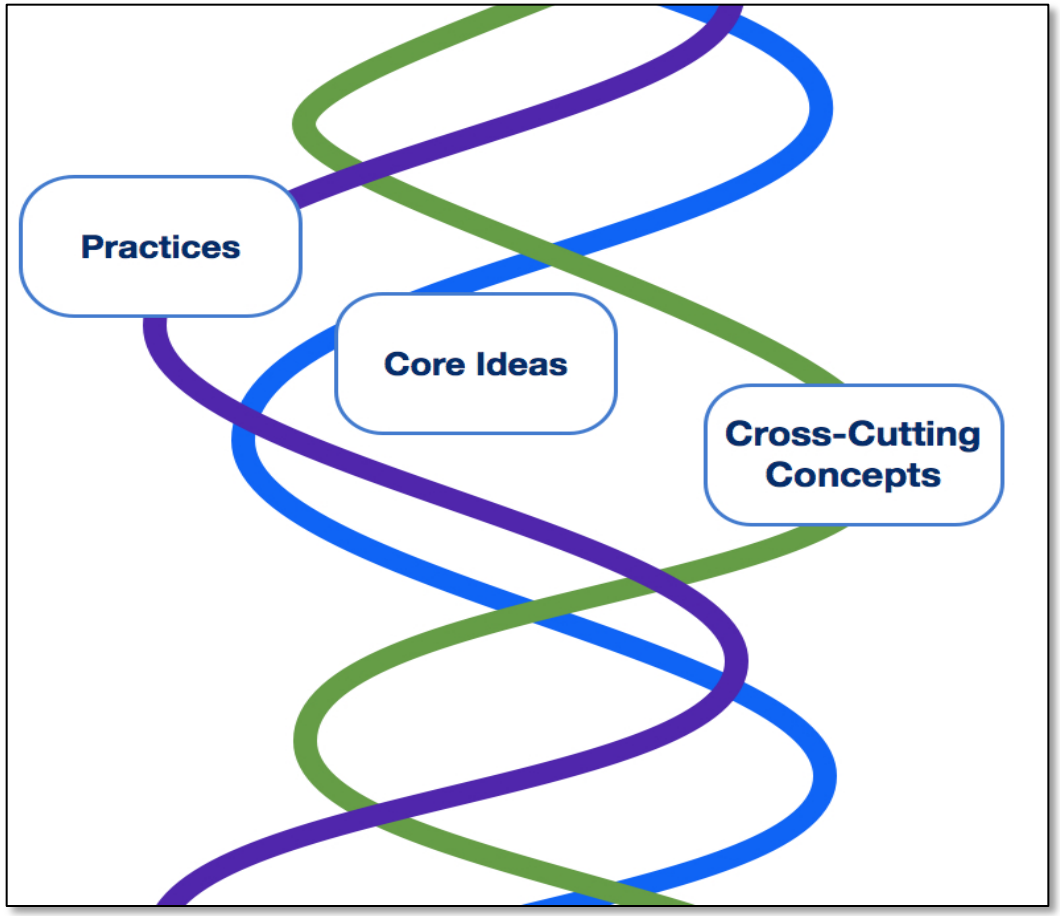
7/2011 – March 2013

MICHIGAN Department of Education

Three Dimensions Intertwined



- The NGSS are written as Performance Expectations
- NGSS will require contextual application of the three dimensions by students.

NEXT GENERATION SCIENCE STANDARDS
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NGSS Science and Engineering Practices

- Asking questions (science) and defining problems (engineering)
- Developing and using models
- Planning and carrying out investigations
- Analyzing and interpreting data
- Using mathematical and computational thinking
- Constructing explanations (science) and designing solutions (engineering)
- Engaging in argument from evidence
- Obtaining, evaluating, and communicating information

NEXT GENERATION SCIENCE STANDARDS
For States, By States

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Crosscutting Concepts

- Patterns
- Cause and effect
- Scale, proportion, and quantity
- Systems and system models
- Energy and matter
- Structure and function
- Stability and change

Framework 4-1

NEXT GENERATION SCIENCE STANDARDS

MICHIGAN Department of Education

Conceptual Focus of NGSS

1. K-12 Science education should reflect the **interconnected nature** of science as it is practiced and experienced in the **real world**.
2. The Next Generation Science Standards are student performance expectations – **NOT curriculum**.
3. The science **concepts build coherently** from K-12.
4. The NGSS focus on **deeper understanding** of content as well as **application** of content.
5. Science and Engineering are **integrated** in the NGSS from K–12.
6. The NGSS and **Common Core State Standards** (ELA/Literacy and Mathematics) are **aligned**.

NEXT GENERATION SCIENCE STANDARDS
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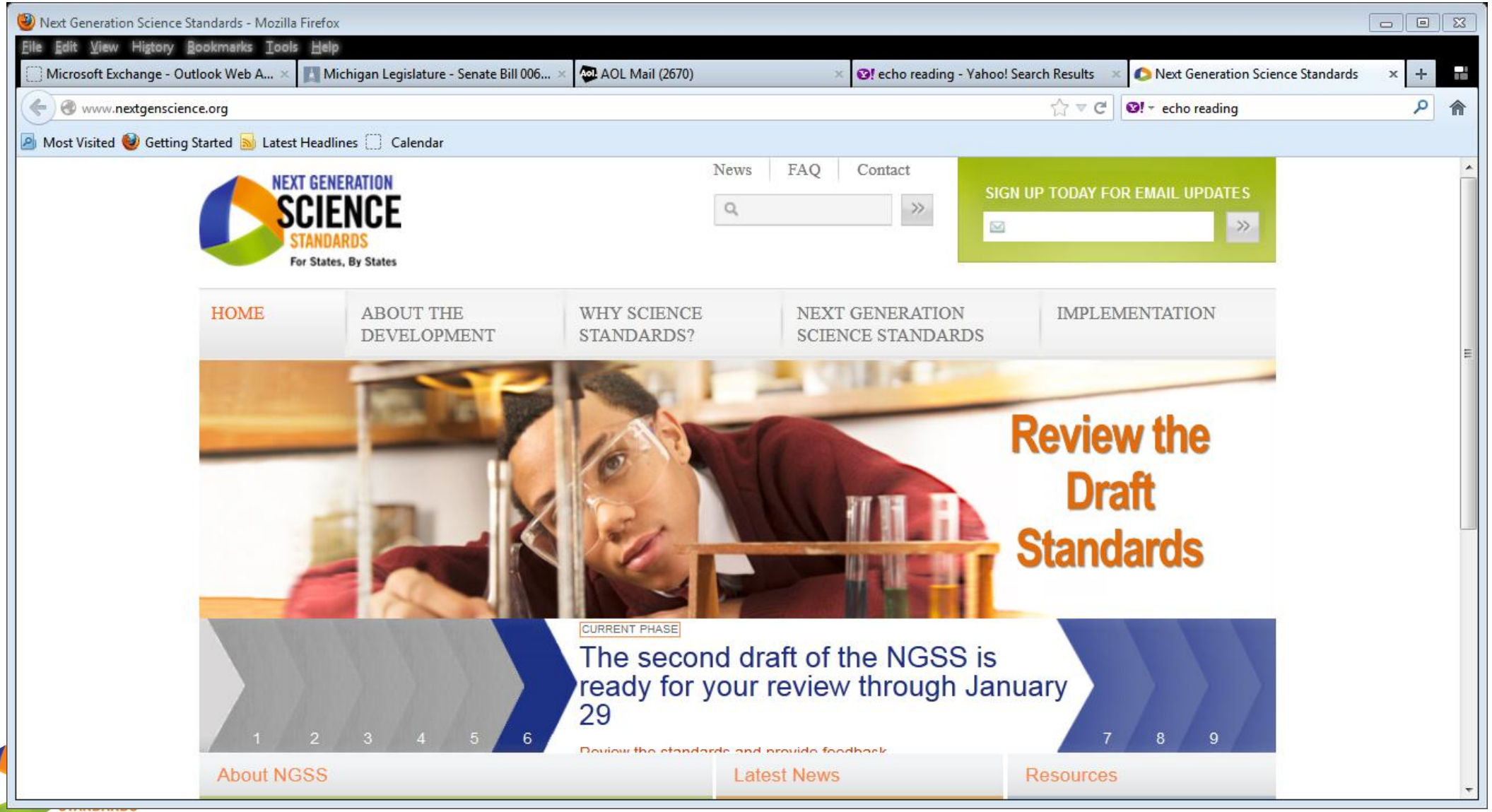
www.nextgenscience.org
Web Access to All NGSS Documents



Next Generation Science Standards

Search Standards by DCI

Search Standards by Topic

The Next Generation Science Standards

Printer-friendly version

The second draft of the Next Generation Science Standards will be available for feedback from January 8, 2013 through January 29, 2013. We fully encourage all interested parties to review the draft as individuals or in groups and provide feedback to the Lead States and writers. In this draft, the standards are coded by Disciplinary Core Ideas (DCI) from the NRC's *Framework for K-12 Science Education*, and are available in two different arrangements- by DCI and by topic.

NGSS Structure

NGSS Second Draft Front Matter

How to Give Feedback on the NGSS / PDF version

Glossary of Terms

Appendices to the Second Draft:

A. **Conceptual Shifts**

B. **Responses to May Public Feedback**

C. **College and Career Readiness**

D. **All Standards, All Students**

Search DCI Arrangements **Search Topic Arrangements**

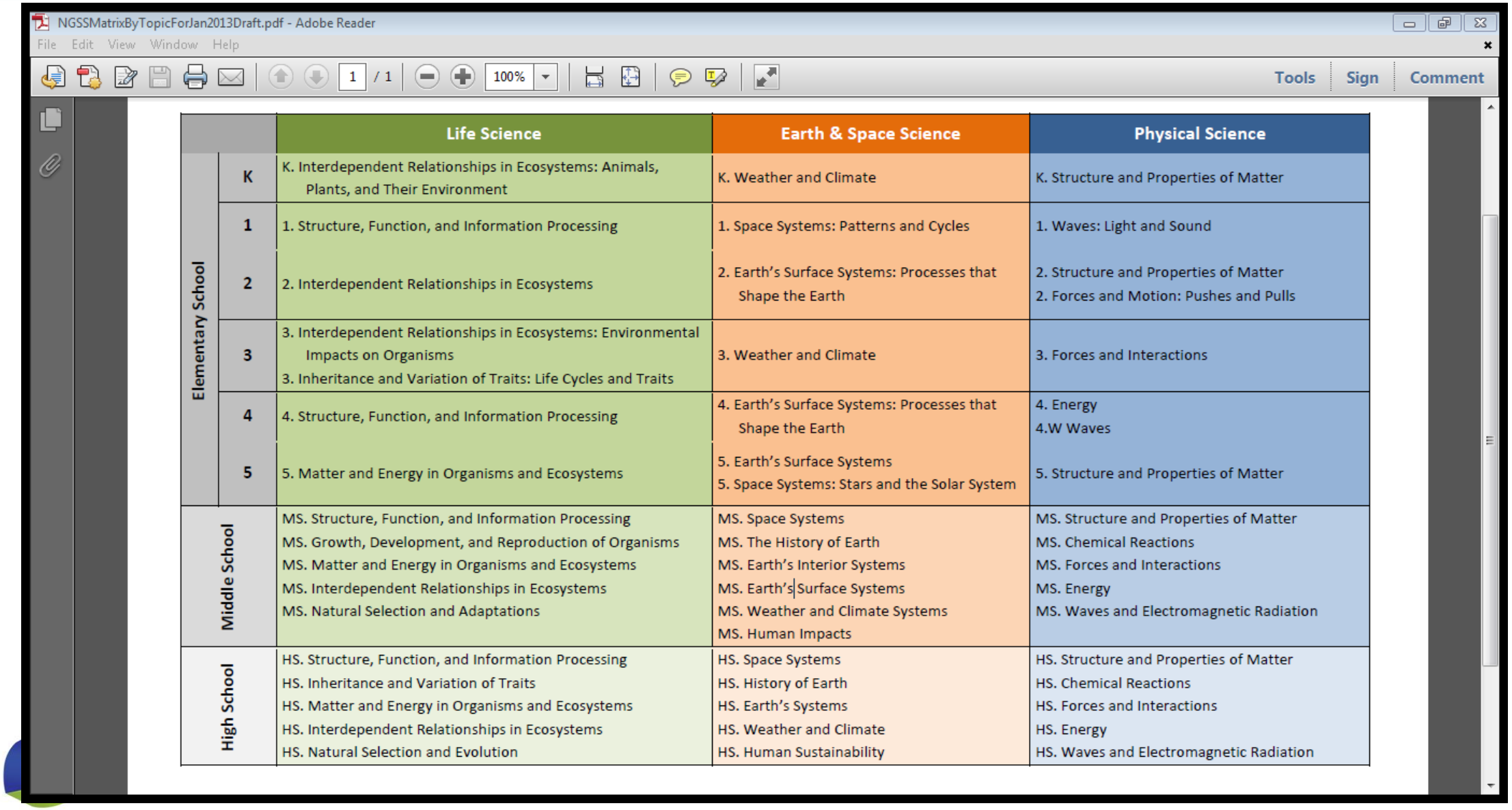
Survey by DCI Arrangement / PDF version

Survey by Topics Arrangement / PDF version

Click here for a PDF of the DCI Arrangement of the standards, click here for a PDF of the Topical Arrangement of the standards, or use the search buttons above to explore interactive versions of the standards.

The NGSS will be completed in March of 2013. Since the May draft release, the Lead States and the writers evaluated the tens of thousands of comments collected during the May 2012 review period and worked on revising the standards. The goal of this public release is to share revisions based on the first public review and the college and career

NGSS Matrix Organized by Topics


NGSSMatrixByTopicForJan2013Draft.pdf - Adobe Reader

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1 / 1 100% Tools Sign Comment

		Life Science	Earth & Space Science	Physical Science
Elementary School	K	K. Interdependent Relationships in Ecosystems: Animals, Plants, and Their Environment	K. Weather and Climate	K. Structure and Properties of Matter
	1	1. Structure, Function, and Information Processing	1. Space Systems: Patterns and Cycles	1. Waves: Light and Sound
	2	2. Interdependent Relationships in Ecosystems	2. Earth's Surface Systems: Processes that Shape the Earth	2. Structure and Properties of Matter 2. Forces and Motion: Pushes and Pulls
	3	3. Interdependent Relationships in Ecosystems: Environmental Impacts on Organisms 3. Inheritance and Variation of Traits: Life Cycles and Traits	3. Weather and Climate	3. Forces and Interactions
	4	4. Structure, Function, and Information Processing	4. Earth's Surface Systems: Processes that Shape the Earth	4. Energy 4.W Waves
	5	5. Matter and Energy in Organisms and Ecosystems	5. Earth's Surface Systems 5. Space Systems: Stars and the Solar System	5. Structure and Properties of Matter
Middle School		MS. Structure, Function, and Information Processing MS. Growth, Development, and Reproduction of Organisms MS. Matter and Energy in Organisms and Ecosystems MS. Interdependent Relationships in Ecosystems MS. Natural Selection and Adaptations	MS. Space Systems MS. The History of Earth MS. Earth's Interior Systems MS. Earth's Surface Systems MS. Weather and Climate Systems MS. Human Impacts	MS. Structure and Properties of Matter MS. Chemical Reactions MS. Forces and Interactions MS. Energy MS. Waves and Electromagnetic Radiation
High School		HS. Structure, Function, and Information Processing HS. Inheritance and Variation of Traits HS. Matter and Energy in Organisms and Ecosystems HS. Interdependent Relationships in Ecosystems HS. Natural Selection and Evolution	HS. Space Systems HS. History of Earth HS. Earth's Systems HS. Weather and Climate HS. Human Sustainability	HS. Structure and Properties of Matter HS. Chemical Reactions HS. Forces and Interactions HS. Energy HS. Waves and Electromagnetic Radiation

January DRAFT NGSS Extensive Supporting Documents

- Appendices have been added to support the NGSS and in response to feedback
  - Appendix A – Conceptual Shifts
  - Appendix B – Responses to May Public Feedback
  - Appendix C – College and Career Readiness
  - Appendix D – All Standards, All Students
  - Appendix E – Disciplinary Core Idea Progressions in the NGSS
  - Appendix F – Science and Engineering Practices in the NGSS
  - Appendix G – Crosscutting Concepts in the NGSS
  - Appendix H – Nature of Science
  - Appendix I – Engineering Design, Technology, and the Applications of Science in the NGSS
  - Appendix J – Model Course Mapping in Middle and High School
  - Appendix K – Connections to the CCSS-Mathematics

Current MI Science Standard Example

MI Inquiry/Reflection Standards

a. Students will develop an understanding that scientific inquiry and reasoning involves observing, questioning, investigating, recording, and developing solutions to problems.
   a. Generate scientific questions based on observations, investigations, and research.
   b. Design and conduct scientific investigations.
   c. Use tools and equipment appropriate to scientific investigations.
   d. Use metric measurement devices in an investigation.
   e. Construct charts and graphs from data and observations.
   f. Identify patterns in data.

b. Students will develop an understanding that scientific inquiry and investigations require analysis and communication of findings, using appropriate technology.
   a. Analyze information from data tables and graphs to answer scientific questions.
   b. Evaluate data, claims, and personal knowledge through collaborative science discourse.
   c. Communicate and defend findings of observations and investigations using evidence.
   d. Draw conclusions from sets of data from multiple trials of a scientific investigation.
   e. Use multiple sources of information to evaluate strengths and weaknesses of claims, arguments, or data.

c. Students will develop an understanding that claims and evidence for their scientific merit should be analyzed.

MI MS Content Standards

a. Classify substances by their chemical properties.
b. Identify the smallest component that makes up an element.
c. Describe how elements in the Periodic Table are organized by similar properties into families.
d. Illustrate the structure of molecules using models or drawings.
e. Describe and illustrate changes in state, in terms of arrangement and relative motion of the atoms or molecules.
f. Explain how mass is conserved as it changes from state to state in a closed system.
g. Identify evidence of chemical change through color, gas formation, solid formation, and temperature change.
h. Compare and contrast the chemical properties of a new substance with the original after a chemical change.
i. Describe the physical and chemical properties of the products and reactants in a chemical change.

NEXT GENERATION SCIENCE STANDARDS
For States, By States

Standards Comparison: [Structure and Properties of Matter]

Current MI Middle School Science Standard

a. Classify substances by their chemical properties.
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NEXT GENERATION SCIENCE STANDARDS For States, By States

Describe the physical and chemical properties of the products and reactants in a chemical change

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Current MI Middle School Science Standard

a. **Classify** substances by their chemical properties.
b. **Identify** the smallest component that makes up an element.
c. **Describe** how elements in the Periodic Table are organized by similar properties into families.
d. **Illustrate** the structure of molecules using **models** or drawings.
e. **Describe** and illustrate changes in state, in terms of arrangement and relative motion of the atoms or molecules.
f. **Explain** how mass is conserved as it changes from state to state in a closed system.
g. **Identify** evidence of chemical change through color, gas formation, solid formation, and temperature change.
h. **Compare and contrast** the chemical properties of a new substance with the original after a chemical change.

NEXT GENERATION SCIENCE STANDARDS For States, By States

Describe the physical and chemical properties of the products and reactants in a chemical change.

Standards Comparison:
Structure and Properties of Matter

NGSS Middle School Sample

a. Develop molecular-level models of a variety of substances, comparing those with simple molecules to those with extended structures.
b. Design a solution that solves a practical problem by using characteristic chemical and physical properties of pure substances.*
c. Develop a molecular level model that depicts and predicts why either temperature change and/or change of state can occur when adding or removing thermal energy from a pure substance.
d. Develop molecular models of reactants and products to support the explanation that atoms, and therefore mass, are conserved in a chemical reaction.
e. Analyze and interpret the properties of products and reactants to determine if a chemical reaction has occurred.
f. Gather and communicate information that people's needs and desires for new materials drive chemistry forward, and that synthetic materials come from natural resources and impact society.*
g. Design, construct, and test a device that either releases or absorbs thermal energy by chemical processes.*

NEXT GENERATION SCIENCE STANDARDS
For States, By States

Standards Comparison:
Structure and Properties of Matter

NGSS Middle School Sample

a. **Develop molecular-level models** of a variety of substances, comparing those with simple molecules to those with extended structures.

b. **Design a solution that solves a practical problem** by using characteristic chemical and physical properties of pure substances.*

c. **Develop a molecular level model that depicts and predicts** why either temperature change and/or change of state can occur when adding or removing thermal energy from a pure substance.

d. **Develop molecular models** of reactants and products to support the explanation that atoms, and therefore mass, are conserved in a chemical reaction.

e. **Analyze and interpret** the properties of products and reactants to determine if a chemical reaction has occurred.

f. **Gather and communicate information** that people's needs and desires for new materials drive chemistry forward, and that synthetic materials come from natural resources and impact society.*

g. **Design, construct, and test a device** that either releases or absorbs thermal energy by chemical processes.*

NEXT GENERATION SCIENCE STANDARDS
For States, By States

K.PS1 Matter and Its Interactions

How to read the standards »
Go back to search results
Related Content »

Go to the NGSS Survey

Views: Disable Popups / Black and white / Practices and Core Ideas / Practices and Crosscutting Concepts / PDF

Students who demonstrate understanding can:

K-PS1-a. **Design and conduct an investigation of different kinds of materials to describe their observable properties and classify the materials based on the patterns observed.** [Clarification Statement: Observations are qualitative only and could include relative length, weight, color, texture, and hardness. Patterns include the similar properties that different materials share.]

K-PS1-b. **Design and conduct investigations to test the idea that some materials can be a solid or liquid depending on temperature.** [*Assessment Boundary: Only a qualitative description of temperature should be used such as hot, cool, and warm.*]

K.PS1-c. **Ask questions, based on observations, to classify different objects by their use and to identify whether they occur naturally or are human-made.*** [Clarification Statement: Patterns include the similar characteristics of objects that determine whether they occur naturally or are human-made.]

The performance expectations above were developed using the following elements from the NRC document *A Framework for K- 12 Science Education*:

Science and Engineering Practices

Asking Questions and Defining Problems
Asking questions and defining problems in grades K–2 builds on prior experiences and progresses to simple descriptive questions that can be tested.

- Ask questions based on observations of the natural and/or designed world. (K-PS1-c)

Planning and Carrying Out Investigations
Planning and carrying out investigations to answer questions or test solutions to problems in K–2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.

- With guidance, design and conduct investigations in collaboration with peers. (K-PS1-a),(K-PS1-b)
- Make direct or indirect observations and/or measurements to collect data which can be used to make comparisons. (K-PS1-a),(K-PS1-b)

Connections to the Nature of Science

Science Knowledge is based on empirical evidence

- Scientists look for patterns and order when making observations about the world.(K-PS1-a),(K-PS1-b),(K-PS1-c)

Disciplinary Core Ideas

PS1.A: Structure and Properties of Matter

- Different kinds of matter exist (e.g., wood, metal, water) and many of them can be either solid or liquid, depending on temperature. (K-PS1-a),(K-PS1-b)
- Matter can be described and classified by its observable properties (e.g., visual, aural, textural), by its uses, and by whether it occurs naturally or is manufactured. (K-PS1-a),(K-PS1-c)

Crosscutting Concepts

Patterns

- Patterns in the natural and human designed world can be observed, used to describe phenomena, and used as evidence. (K-PS1-a),(K-PS1-c)

Cause and Effect

- Events have causes that generate observable patterns. (K-PS1-b)
- Simple tests can be designed to gather evidence to support or refute student ideas about causes. (K-PS1-b)

Connections to Engineering, Technology, and Applications of Science

Influence of Engineering, Technology, and Science on Society and the Natural World

- People depend on various technologies in their lives; human life would be very different without technology. (K-PS1-c)
- Every human-made product is designed by applying some knowledge of the natural world and is built by using materials derived from the natural world, even when the materials are not themselves natural—for example, spoons made from refined metals. (K-PS1-c)

questions or test solutions to problems in K–2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.

- With guidance, design and conduct investigations in collaboration with peers. (K-PS1-a),(K-PS1-b)
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to support or refute student ideas about causes. (K-PS1-b)

Connections to Engineering, Technology, and Applications of Science

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- Every human-made product is designed by applying some knowledge of the natural world and is built by using materials derived from the natural world, even when the materials are not themselves natural—for example, spoons made from refined metals. (K-PS1-c)

Connections to other DCIs in this grade-level: will be added in future version.

Articulation of DCIs across grade-levels: will be added in future version.

Common Core State Standards Connections:

ELA/Literacy -

RI.K.1 With prompting and support, ask and answer questions about key details in a text. (K-PS1-c)

W.K.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. (K-PS1-c)

SL.K.3 Ask and answer questions in order to seek help, get information, or clarify something that is not understood. (K-PS1-c)

Mathematics -

MP.3 Construct viable arguments and critique the reasoning of others. (K-PS1-b)

K.MD.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. (K-PS1-a),(K-PS1-b)

K.MD.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. (K-PS1-a),(K- PS1-b)

* The performance expectations marked with an asterisk integrate traditional science content with engineering through a Practice, Disciplinary Core Idea, or Crosscutting Concept.

NEXT GENERATION SCIENCE STANDARDS
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Defining College and Career Readiness for the Next Generation Science Standards

Identifying CCR in Science

- NGSS College and Career Readiness Lead State Review
  - Definition and Research Review included in NGSS Appendix C
- Complements Michigan's Career and College Readiness work
  - Complements CCSS and MMC Requirements

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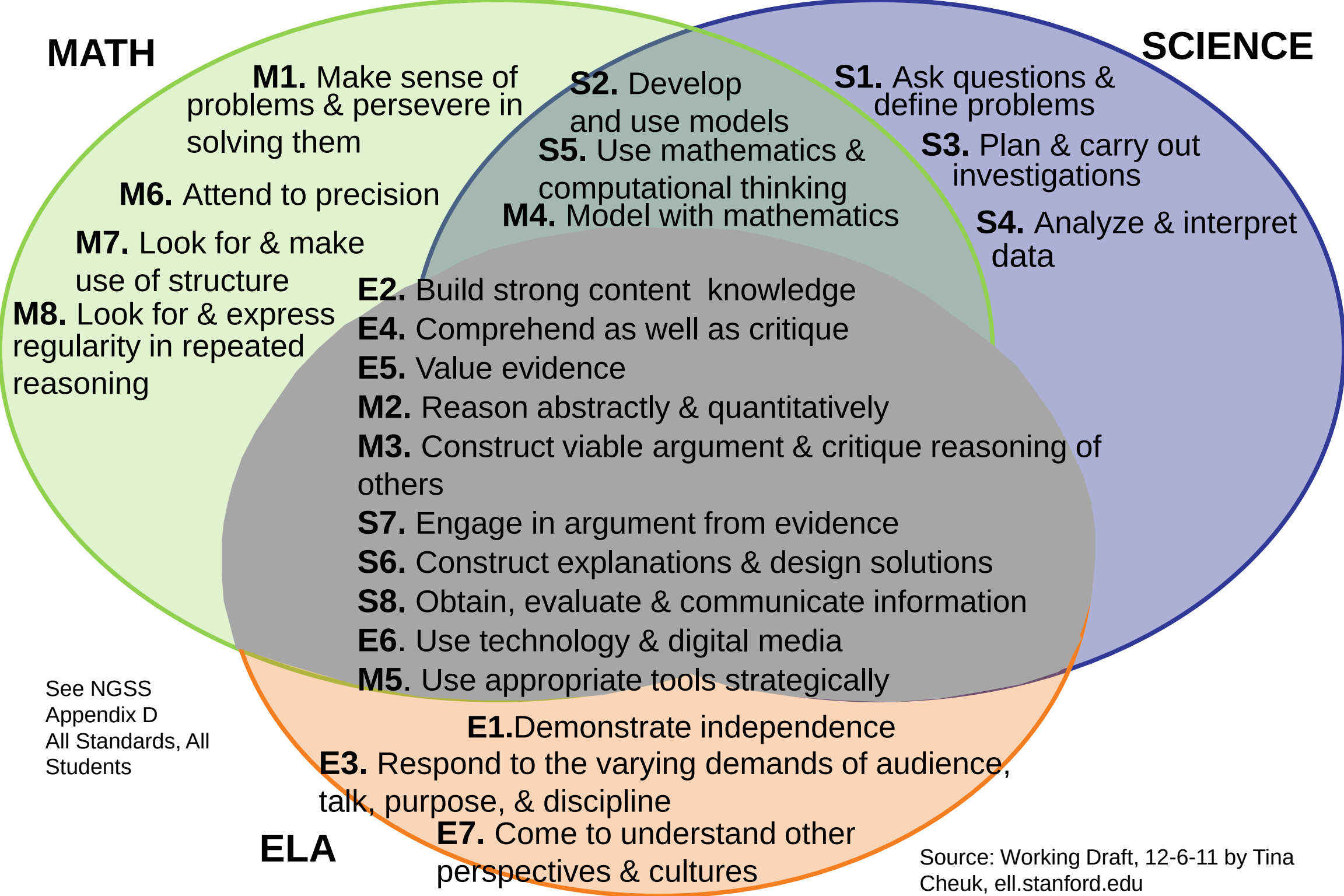

See NGSS Appendix D All Standards, All Students

Source: Working Draft, 12-6-11 by Tina Cheuk, ell.stanford.edu

Michigan Literacy Anchor Standards	NRC Science and Engineering Practices	Michigan Mathematics Practices
Technology and Tools		
• Integrate and evaluate content presented in diverse formats and media • Use digital media and visual displays of data to express information; produce and publish writing, interact and collaborate with others; and gather relevant information from multiple sources	• Use mathematics, information and computer technology, and computational thinking • Develop and use models	• Use appropriate tools strategically • Model with mathematics
Argument and Reasoning		
• Evaluate argument and claims in a text, speech, or write arguments to support claims • Draw evidence from literary and informational texts to support analysis, reflection, and research • Present information, findings, and supporting evidence	• Engage in argument from evidence • Analyze and interpret data	• Construct viable arguments and critique the reasoning of others • Reason abstractly and quantitatively
Communication and Collaboration		
• Evaluate argument and claims in a text, speech, or write arguments to support claims • Draw evidence from literary and informational texts to support analysis, reflection, and research • Present information, findings, and supporting evidence	• Obtain, evaluate, and communicate information	• Attend to precision
Problem Solving		
• Effectively converse and collaborate with diverse partners • Use language to comprehend more fully when reading or listening • Produce clear and coherent writing	• Ask questions (science) and define problems (engineering) • Plan and carry out investigations • Construct explanations (science) and design solutions (engineering)	• Make sense of problems and persevere in solving them. • Look for and make sense of structure. • Look for and express regularity in repeated reasoning

Career and College Ready Students…

· Use **technology and tools** strategically in learning and communicating;

· Use **argument and reasoning** to do research, construct arguments, and critique the reasoning of others;

·**Communicate and collaborate** effectively with a variety of audiences; and

· **Solve problems**, construct explanations and design solutions.

CCR in Science Draft Definition (NGSS)

College and Career Ready Students can demonstrate evidence of:

- Self-directed planning, monitoring, and evaluating;
- Applying knowledge more flexibly across various disciplines;
- Employing valid and reliable research strategies;
- Exhibiting evidence of the effective transfer of mathematics and disciplinary literacy skills to science.

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Michigan Core Expectations Overview (2006)

Overarching Expectations
21st Century Learning Skills
Policy on Learning Expectations
Habits of Mind ■ ■ ■ ■

Cross-Content Expectations

- **ELA Strands 1 and 2 – Communication and Reading**
- **Mathematics Strand 1 – Quantitative Literacy and Logic**
- **Science – Inquiry and Reflection**
- **Social Studies – General Knowledge, Processes, and Skills**
- **ACT College Readiness Standards**

ELA	MA	SC	SS
HSCE	HSCE	HSCE	HSCE
[CCSS]	[CCSS]	[NGSS]	

Michigan Merit Curriculum

- CCSS replace High School Content Expectations and Grade Level Content Expectations for **mathematics** and **ELA *only***
- In addition, CCSS define and clarify **literacy requirements** for other MMC credits (including science)
- NGSS will replace HSCE for **science**

Transitioning to New Standards

- Get to know the CCSS and NGSS
- Find Common Ground – What will NOT change
- Focus Energy – look for leverage, endurance, essential for next grade
- Develop Common Assessments
- **-- *Doug Reeves, The Leadership and Learning Center***

Implications for Instruction and Assessment

- Get to know the NGSS and the Framework
- Implement the practices; identify content that will change / will not change
- Focus Energy – look for leverage, endurance, essential for next grade
  - Identify instructional implications of the performance expectations
  - Build strong K-12 progressions
  - Integrate using crosscutting concepts and practices
- Develop Common Assessments
- Develop State Assessment Systems that reflect instruction and report at the practice and topic levels.

Michigan NGSS Development Timeline

- Lead State Meeting (Achieve, Sept. 2011)
- ***MI Internal Review*** Team reviews first draft (Nov./Dec. 2011)
- Lead States meet with Writers (Early January 2012)
- Critical Stakeholders, All States, Leads (Jan. – Feb.)
- ***Public Draft; MI State Review Meetings; State Report (May)***
- Lead States Implementation Planning (Nov. 2011 - Ongoing)
- All State Review; ***MI Internal Review (Summer, Fall)***
- ***2nd Public Draft (Jan. 2013)***
- Final Draft; ***MI Internal Review (Feb. 2013)***
- Final State Report (Feb. 2013)
- ***NGSS Released for Adoption (Late March 2013)***
- Lead State Adoption Planning (Jan.- March 2013)

NEXT GENERATION SCIENCE STANDARDS

Transitioning to NGSS
Course Pathway and Progression Options

Appendix J Model Course Mapping in MS and HS for Meeting NGSS

- Reflect foundational ideas and organization of the *Framework*
- Models will be developed that offer ideas for addressing ALL HS NGSS for ALL students in 3 HS credits required by Michigan Merit Curriculum

Appendix E Progressions within NGSS

- Matrix describes K-12 Progression of Topics
- MDE will adapt this matrix to provide comparison with current GLCE/HSCE

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Transitioning to NGSS
Connections to CCSS

Appendix I Engineering Design, Technology, and the Applications of Science in the NGSS

- Rationale for increased emphasis on engineering and technology
- Inspirational – importance in solving meaningful problems
- Practical – opportunities to deepen understanding of science by applying science knowledge in real-world contexts

Appendix K Connections to CCSS-Mathematics

- Consistency with CCSS-ELA/Literacy
- Consistency with CCSS-Mathematics
- Listing of NGSS Grade-level Topic Connections to CCSS-Mathematics

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Transitioning to NGSS

- Current state science assessment at Fall 5, Fall 8, Spring 11
- Beginning in 2015, science assessment at Spring 4, Spring 7, Spring 11
- Anticipate 3-4 year transition to full implementation of NGSS

NEXT GENERATION SCIENCE STANDARDS
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NGSS Information, MDE Contacts

- Official NGSS Site www.nextgenscience.org
- MDE NGSS Page Shortcut
  www.michigan.gov/ngss

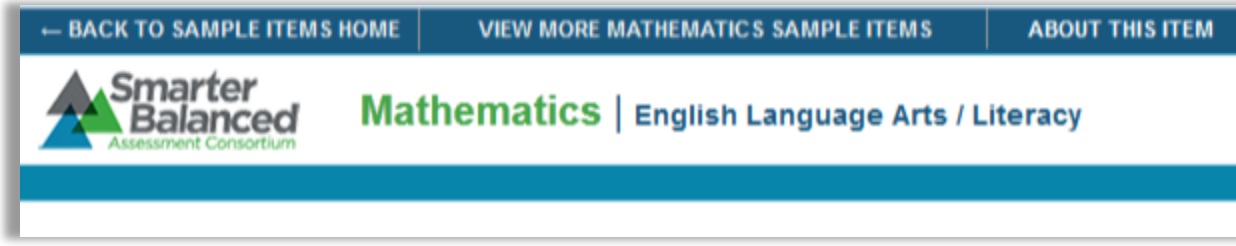
  http://michigan.gov/mde/0,4615,7-140-28753_38684_28760-277001--,00.html
- Susan Codere, NGSS Project Coordinator
  CodereS@michigan.gov
- Megan Schrauben, Integrated Education Consultant
  SchraubenM1@michigan.gov

NEXT GENERATION SCIENCE STANDARDS
For States, By States

MICHIGAN Department of Education

COMMON CORE
STATE STANDARDS INITIATIVE
PREPARING AMERICA'S STUDENTS FOR COLLEGE & CAREER

Additional CCSS and SBAC Information



http://www.smarterbalanced.org/

Common Core State Standards Initiative website www.corestandards.org

Draft Assessment Claims for English Language Arts/Literacy

Reading	"Students can **read closely and analytically** to comprehend a range of increasingly complex literary and informational texts."
Writing	"Students can produce effective and well-grounded **writing** for a range of purposes and audiences."
Speaking/Listening	"Students can employ effective **speaking and listening skills** for a range of purposes and audiences."
Research/Inquiry	"Students can engage in **research/inquiry** to investigate topics, analyze, integrate, and present information."
Total ELA/Literacy High School	"Students can demonstrate **college and career readiness in ELA and literacy**."

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Proposed Assessment for Mathematics

Concepts and Procedures	"Students can explain and apply mathematical **concepts** and interpret and carry out mathematical **procedures** with precision and fluency."
Problem Solving	"Students can solve a range of complex well-posed **problems** in pure and applied mathematics, making productive use of knowledge and strategies."
Communicating Reasoning	"Students can clearly and precisely construct viable **arguments** to support their own reasoning and to critique the reasoning of others."
Data Analysis and Modeling	"Students can analyze complex, real-world scenarios and can construct and use mathematical **models** to interpret and **solve problems**."

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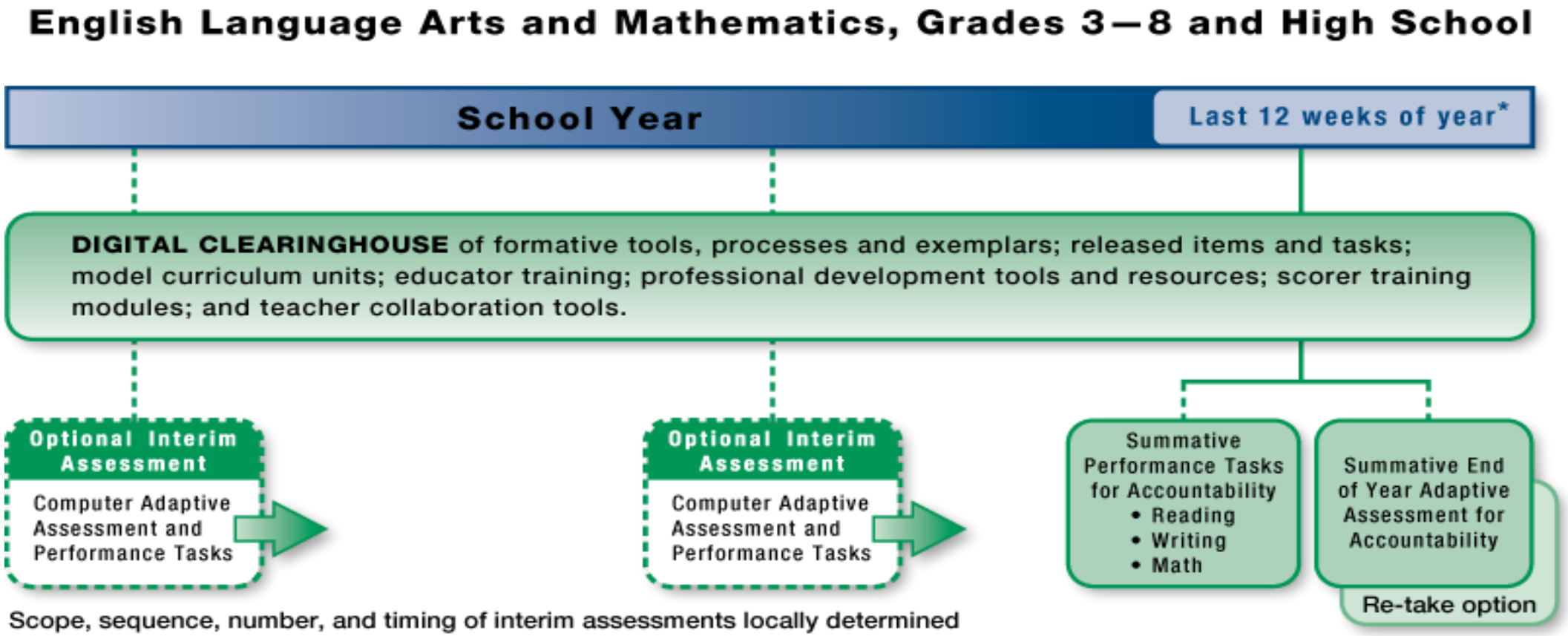
A Balanced Assessment System



* Time windows may be adjusted based on results from the research agenda and final implementation decisions.

NEXT GENERATION SCIENCE STANDARDS

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SBAC Major Features

- Online, rapid turnaround of results
- Computer adaptive summative and interim assessments
- Item types
  - Multiple Choice
  - Short Constructed Response
  - Extended Constructed Response
  - Technology Enhanced
  - Performance Tasks

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Proposed/Possible NGSS Assessment Timeline

- NGSS released for state adoption (Late March 2013)
- Anticipated SBE Adoption (May 2013)
- Rollout Late May 2013
- Spring – Fall 2013 Develop and refine transition plans; focus on overarching practices and crosscutting concepts as they fit within current curricular plans; develop assessment claims and targets.
- SY 2013-14 Formalize transition plans, curriculum alignment plans; provide professional development to support transition. Begin planned implementation. Review assessment claims and targets.

Proposed/Possible NGSS Assessment Timeline

- SY 2014-15 and 2015-16 Continue planned implementation; provide professional development to support transition. Develop model formative and summative assessment tools and performance tasks.
- SY 2016-17 Full K-12 implementation; first realistic opportunity for full state-level assessment of new standards.
- Assessment could begin to focus on portions of NGSS on earlier assessments based on transition plan.

For More Information

Next Generation Science Standards website
http://www.nextgenscience.org/

Common Core State Standards Initiative website
www.corestandards.org

Michigan's Mission Possible: Get ALL Adolescents Literate and Learning
http://www.missionliteracy.com/

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