# Southfield Public Schools



# SEVENTH GRADE

English Language Arts Curriculum Handbook

# Using the Curriculum Guide

This guide is intended to address the continuum of learning as it develops across the grade levels. As children enter seventh grade, students will continue to build important reading, writing, speaking, and listening skills. Students will build on foundational reading skills, strengthening their ability to read fluently and decode more complex text. They will think, talk, and write about what they read in a variety of texts, such as stories, books, articles, and other sources of information including the Internet. In collaborative discussions, students will learn how to build on what others are saying. They will write to describe an event, provide information on a topic, or share an opinion. In their writing, students will learn how to develop a topic and strengthen their skills by editing and revising. Although there are benchmarks for each grade level, it must be remembered that children progress at paces specific to their abilities and interests.

Therefore, this guide is an overview of the various curriculums and methodologies used to meet the Common Core and Michigan State Learning Standards for each grade level and content area.

# CURRICULUM English Language Arts Program

Our English Language Arts department is committed to developing literate students who demonstrate reading, writing, and critical thinking skills necessary to make them successful in today's global society. By engaging with rich and diverse texts across a variety of genres, time periods, perspectives, and cultures, students will be prepared to navigate complex concepts and acquire the skills necessary for living and learning in the 21st century. In grade seven, students will continue to develop the ability to cite relevant evidence when interpreting or analyzing a text or supporting their points in speaking and writing. Students will also build academic vocabulary as he or she reads more complex texts, including stories, plays, historical novels, poems, and informational books and articles.

## Activities in these areas will include:

- ★ Analyzing how the form or structure of a play or poem contributes to its meaning
- ★ Analyzing how particular elements of a story or play interact (like how the setting shapes the characters or plot)
- ★ Determining how an author develops and contrasts the points of view of different characters or narrators in a text
- ★ Conducting short research projects, drawing on several sources and identifying related questions for further research and investigation
- ★ Engaging in a range of classroom discussions on topics and texts, expressing ideas clearly and building on the ideas of others
- ★ Identifying a speaker's argument and specific claims and evaluating the reasoning and evidence behind these claims
- ★ Using clues such as word roots or add-ons to a word (such as the prefix hyper-, which means 'excessive' in the words hyperactive and hypersensitive) to determine the meaning of a word
- ★ Interpreting figures of speech or references to literature or mythology in a text
- ★ Writing for a range of purposes and audiences

In grade seven, students will read a wide range of literature, including stories, plays, and poems. Additionally, they will read to learn information about history, the world, science, and other areas. Here are just a few examples of how your child will develop important reading skills across grade levels.

## READING

Students in seventh grade should experience a balance of literature and informational texts designed to create opportunities for learners to engage with a variety of topics and texts, and have discussions about texts that support language

development and knowledge building. Creating this learning environment for readers will take a variety of formats, including shared readings, paired readings, independent readings and other learning activities that incorporate literacy materials, talking, and writing. These instructional events are referred to as 'reading or literacy experiences' because the focus is on using texts, printed and visual, to develop readers' concepts of how meaning is conveyed through reading and writing, and in turn their ability to make meaning of increasingly complex text. Students apply strategies to analyze, compare, and evaluate ideas when reading fiction and nonfiction texts. Students are supported through instruction, mentor texts, and book clubs, as they work to comprehend longer, more challenging books. As readers they will be expected to read closely and cite evidence from both fiction and nonfiction in order to support an analysis of the text.

### WRITING

Seventh graders use a writing process to improve their writing skills in narrative, argumentative, and informational writing. Students will learn to use relevant evidence and clear reasoning when supporting their own points in both speaking and writing. Students will learn and apply the rules of grammar in their own writing.

Writing tasks in grade seven may include stories, essays, reports, and persuasive papers. Here are just a few examples of how your child will develop important writing skills across grade levels.

Grade Six Writing	Grade Seven Writing	Grade Eight Writing
Students introduce a topic and	Students introduce a topic	Students introduce a topic clearly,
develop the topic with relevant	clearly, previewing what is to	previewing what is to follow, and
facts, definitions, concrete	follow, and develop the topic with	develop the topic with relevant,
details, quotations, or other	relevant facts, definitions,	well-chosen facts, definitions,
information.	concrete details, quotations, or	concrete details, quotations, or other
	other information.	information.
Students provide a concluding		
statement or section that follows	Students provide a concluding	Students provide a concluding
from the information or	statement or section that follows	statement or section that follows from
explanation presented.	from and supports the information	and supports the information or
	or explanation presented.	explanation presented.
Students organize ideas,		
concepts, and information using	Students organize ideas,	Students organize ideas, concepts, and
strategies such as definition,	concepts, and information using	information into broader categories.
classification, comparison/	strategies such as definition,	
contrast, and cause/effect.	classification,	Students use appropriate and varied
	comparison/contrast, and cause/	transitions to create cohesion and
Students use appropriate	effect.	clarify the relationships among ideas
transitions to clarify the		and concepts.
relationships among ideas and	Students use appropriate	
concepts.	transitions to create cohesion and	Students use precise language and
Students use precise language and	clarify the relationships among	subject-specific vocabulary to inform
subject-specific	ideas and concepts.	about or explain the topic.
	Students use precise language and	
	subject-specific vocabulary to	
	inform or explain the topic.	

Some writing guidelines may seem similar from year to year. However, with practice at each grade level, students continue to learn and apply the rules of standard written English and to strengthen and expand their vocabulary, use of language, and sophistication in the development and organization of ideas.

## Instructional Resources (Include But Not Limited To)

McGraw Hill StudySync Scrible Newsela i-Ready Atlas Rubicon Learning Ally

## Assessments & Progress Monitoring

- i-Ready Reading Diagnostic is administered three times a year to provide teachers with a complete picture of student performance relating to their grade level and national norms.
- M-Step ELA is administered once a year to gauge how well students are mastering state standards.

McGraw Hill's StudySync is a complete rigorous ELA curriculum designed to meet the needs of every learner. *StudySync* uses a variety of texts to build language and comprehension skills through reading, writing and research. The StudySync curriculum includes:

- Integrated reading and writing
- Embedded skills lessons focusing on comprehension, reading, writing, and research
- Lessons that emphasize explicit vocabulary instruction, language acquisition, and reading comprehension
- Extended writing instruction through a combination of writing process and skill lessons, guide students through the stages of planning, drafting, revising, editing, and publishing.
- Self, peer, and teacher evaluations are embedded in every unit lesson

Every student using *StudySync* has the same opportunity and access regardless of native language, proficiency level, or physical, social, and emotional ability.

EL Resources English Language Learner Resources are designed to match the thematic focus, text structure, and writing form of the unit.

# CURRICULUM <u>Social Studies</u> Early World History

Our Social Studies department is committed to promoting civic competence—the knowledge, intellectual processes, and democratic dispositions required of students to be active and engaged participants in public life. By making civic competence a central aim, Southfield Public Schools emphasize the importance of educating students who are committed to the ideas and values of democracy. Civic competence rests on this commitment to democratic values, and requires that citizens have the ability to use their knowledge about their community, nation, and world; to apply inquiry processes; and to employ skills of data collection and analysis, collaboration, decision-making, and problem-solving. Young people who are knowledgeable, skillful, and committed to democracy are necessary to sustaining and improving our democratic way of life, and participating as members of a global community.

In grade seven, the social studies curriculum focuses on early world history and geography with a deliberate focus on content literacy. Students begin their exploration into world history with a focus on historical thinking. By unpacking historical and geographic thinking, students learn how these disciplines are distinct in how they ask questions and frame problems to organize and drive inquiry. Students learn that historians must have some evidence to support the claims they make in their accounts. They investigate how these social scientists select, analyze, and organize evidence, and then use that evidence to create accounts that answer questions or problems. By introducing students to the "invisible" tools that historians use to create historical accounts -- significance, social institutions, temporal frames (time), and spatial scales (space) - the course deepens students' historical habits of mind and builds students' social and content literacy.

In this grade, students investigate human history from the beginning until around 1500. They explore major and significant changes in each era through a chronological organization. Students learn about the earliest humans and explore early migration and settlement patterns. In studying the origins of farming and its impact upon emerging human cultures, students analyze evidence from the fields of archaeology and anthropology, and employ a wide range of data sources including artifacts, photographs, and geographic information. Students examine how the emergence of pastoral and agrarian societies set the stage for the development of powerful empires, trade networks, and the diffusion of people, resources, and ideas.

Extending students' study of world history through Era 4 (300 CE - 1500 CE) places world religions and development of empires in the Americas (Aztecs, Incas, Mayans) in their historical context. The rise and fall of empires, as well as the nomadic groups in Afro-Eurasia, generated new zones of cultural and commercial exchange that linked regions across the world and enabled ideas to spread. Students also examine the development of belief systems in their historical context. These new belief systems had distinctive beliefs, texts, and rituals. Each shaped cultures by developing ethical practices and establishing codes within which diverse people were able to communicate and interact, often well beyond their local neighborhood. In doing so, students consider why some belief systems grew into world religions. In studying the precursors to the meeting of the "Three Worlds," students expand their view of human history and begin to see the story of the United States in a more global context. The course concludes with students analyzing global patterns of continuity and change over time, and using evidence to construct historical arguments about the past.

C3 Framework Organization			
Dimension 1: Developing Questions and Planning Inquiries	Dimension 2: Applying Disciplinary Tools and Concepts	Dimension 3: Evaluating Sources and Using Evidence	Dimension 4: Communicating Conclusions and Taking Informed Action
Developing Questions and Planning Inquiries	Civics	Gathering and	Communicating
	Economics	Evaluating Sources	Conclusions
	Geography	Developing Claims and	Taking Informed
	History	Using Evidence	Action

#### HISTORY:

#### ERA 1 - THE BEGINNINGS OF HUMAN SOCIETY- BEGINNINGS TO

**4000 BCE:** Explain the basic features of and differences between hunter-gatherer societies and pastoral nomads. Analyze and explain the geographic, environmental, biological, and cultural processes that influenced the rise of the earliest human communities, the migration and spread of people throughout the world, and the causes and consequences of the growth of agriculture.

## ERA 2 - EARLY CIVILIZATIONS AND CULTURES AND THE EMERGENCE OF PASTORAL PEOPLES, 4000 TO 1000 BCE AND WESTERN HEMISPHERE 4000 BCE

**to 1500 CE:** Describe and compare defining characteristics of early civilization and pastoral societies, where they emerged, and how they spread. This era includes civilizations in AfroEurasia from 4000 to 1000 BCE as well as cultures in developing the Western Hemisphere from 4000 BCE into Eras 3 and 4 so teachers can compare early civilizations around the globe.

#### ERA 3 - CLASSICAL TRADITIONS, WORLD RELIGIONS, AND MAJOR

*EMPIRES, 1000 BCE TO 300 CE*: Analyze classical civilizations and empires and the emergence of major world religions and large-scale empires. During this era, innovations and social, political, and economic changes occurred through the emergence of classical civilizations in Africa, Eurasia, and

the Americas. Africa and Eurasia moved in the direction of human interchange as a result of trade, empire building, and the diffusion of skills and ideas. Similar interactions occurred in the Americas. Six of the world's major faiths and ethical systems emerged and classical civilizations established institutions, systems of thought, and cultural styles that would influence neighboring peoples and endure for centuries.

**ERA 4 - BRIDGE TO ERA 4 - CASE STUDIES FROM THREE CONTINENTS:** Students will study case studies from Europe, Africa, and the Americas that are intended to set the stage for Integrated U.S. History in Grade 8.

GEOGRAPHY:

**THE WORLD IN SPATIAL TERMS:** Students will use geographical inquiry and analysis to answer questions about relationships between peoples, cultures, and their environments, and interaction among places and cultures within the era under study.

**INVESTIGATION AND ANALYSIS:** Throughout the school year, the students are introduced to topics that address issues that integrate time and place. Included are capstone projects that entail the investigation of historical issues that have significance for the student and are clearly linked to the world outside the classroom. The topics and issues are developed as possible capstone projects within units and at the end of the course.

**HUMAN SYSTEMS:** Students study each era to understand how the language and perspective of geography can help students understand the past and make comparisons with the present.

**ENVIRONMENT AND SOCIETY:** Students will explain how humans used, adapted to, and modified the environment in the era studied.

**PUBLIC DISCOURSE**, **DECISION MAKING**, **AND CITIZEN INVOLVEMENT**: Identify and analyze global issues and develop persuasive communication about a global issue.

# CURRICULUM

# <u>Math</u>

#### Seventh Grade Overview

In seventh grade, students draw, construct, and describe geometric figures. They use knowledge of angles and writing equations to describe relationships between figures and to solve problems. Students continue developing knowledge of the number system as they extend their previous understandings of operations with fractions to add, subtract, multiply, and divide positive and negative rational numbers. For the first time, students are introduced to probability. They investigate chance processes and develop, use, and evaluate probability models. Students continue analyzing one variable statistics and use random sampling to think about data sets and use mathematical tools to compare two data sets.

A primary focus of the course is the development of proportional reasoning. Proportional reasoning serves as a foundation to support connections between mathematical ideas and coherence across grades. For instance, drawing on the rate and ratio reasoning from the previous course, students apply proportional reasoning concretely with scale drawings. Their geometric experiences lead into analyzing and representing proportional relationships between quantities, computing unit rates, and solving multistep ratio and percent problems using tables, graphs, and equations. In addition to solving equations that represent proportional relationships.

## District Math Resources

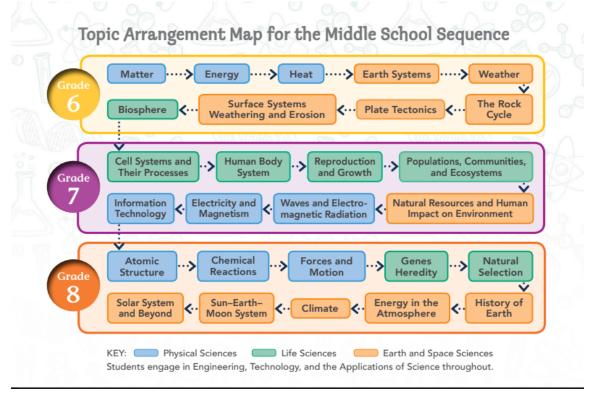
- Mathematics Curriculum tool 6-8: enVision Mathematics 6-8
- Intervention Support: IXL Mathematics Learning
- Supplemental Resource Brainpop

	Months	Торіс
Quarter 1	September – October	<ol> <li>Rational Number Operations</li> <li>Analyze and Use Proportional Relationships</li> </ol>
Quarter 2	November -January	<ul><li>3 Analyze and Solve Percent Problems</li><li>4 Generate Equivalent Expressions</li></ul>
Quarter 3	January -March	<ul> <li>5 Solve Problems Using Equations and Inequalities</li> <li>6 Use Sampling to Draw Inferences About Populations</li> </ul>
Quarter 4	April - June	7 Probability 8 Solve Problems Involving Geometry

# CURRICULUM <u>Science</u>

### Science Program Overview 6-8

Middle Grade Science comprises three units of Science Learning: Physical Sciences, Life Sciences, Earth and Space Sciences. Below is the suggested flow of lessons to create a learning path to engage our Middle School learners in 3 Dimensional science learning to facilitate connections and build a cohesive understanding of science over time.



Adopted from Elevate Science Modules Topic Sequence

**District Resource 6-8** 

- Curriculum tool: <u>Elevate Science Modules with labs by Savvas</u>
- Supplemental Resource: BrainPOP

# Physical Sciences Module

Elevate Science Modules & Topics	NGSS Middle Grades 6-8 Performance Expectations	
	Module: Structure and Properties of Matter	
Topic 1: Introduction to Matter	(MS-PS1-1) Develop models to describe the atomic composition of simple molecules and extended structures. (MS-PS1-2) Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred	
Topic 2: Solids, Liquids, and Gases	(MS-PS1-4) Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.	
	Module: Energy Transfer	
Topic 1: Energy	<ul> <li>(MS-PS3-1) Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object.</li> <li>(MS-PS3-2) Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system.</li> <li>(MS-PS3-5) Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.</li> </ul>	
Topic 2: Thermal Energy	<ul> <li>(MS-PS3-3) Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.</li> <li>(MS-PS3-4) Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample.</li> <li>(MS-PS3-5) Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.</li> </ul>	
Module: Atoms and Chemical Reactions		
Topic 1: Atoms and the Periodic Table	(MS-PS1-1) Develop models to describe the atomic composition of simple molecules and extended structures.	
Topic 2: Chemical	(MS-PS1-2) Analyze and interpret data on the properties of substances	

Reactions	before and after the substances interact to determine if a chemical reaction has occurred. (MS-PS1-3) Gather and make sense of information to describe that synthetic materials come from natural resources and impact society. (MS-PS1-5) Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved. (MS-PS1-6) Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.		
	Module: Forces		
Topic 1: Forces and Motion	<ul> <li>(MS-PS2-1) Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects.</li> <li>(MS-PS2-2) Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object.</li> <li>(MS-PS2-4) Construct and present arguments using evidence to support the claim that gravitational interactions are attractive and depend on the masses of interacting objects.</li> <li>(MS-PS3-2) Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system.</li> </ul>		
Topic 2: Electricity and Magnetism	<ul> <li>(MS-PS2-3) Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.</li> <li>(MS-PS2-5) Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.</li> <li>(MS-PS3-2) Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system.</li> </ul>		
	Module: Waves and Information Technologies		
Topic 1: Waves and Electromagnetic Radiation	(MS-PS4-1) Use mathematical representations to describe a simple model for waves that includes how the amplitude of a wave is related to the energy in a wave. (MS-PS4-2) Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials.		
Topic 2: Information Technologies	(MS-PS4-3) Integrate qualitative scientific and technical information to support the claim that digitized signals are a more reliable way to encode and		

	transmit information than analog signals.
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## Life Sciences Module

Elevate Science Modules & Topics	NGSS Middle Grades 6-8 Performance Expectations
	Module: Structure and Properties of Matter
Topic 1: Living Things in the Biosphere	(MS-LS1-1) Conduct an investigation to provide evidence that living things are made of cells, either one cell or many different numbers and types of cells.
Topic 2: The Cell System	(MS-LS1-1) Conduct an investigation to provide evidence that living things are made of cells, either one cell or many different numbers and types of cells. (MS-LS1-2) Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function. (MS-LS1-3) Use arguments supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.
Topic 3: Human Body Systems	(MS-LS1-3) Use arguments supported by evidence for how the body is a system of interacting subsystems composed of groups of cells. (MS-LS1-8) Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories
Topic 4: Reproduction and Growth	(MS-LS1-4) Use arguments based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively. (MS-LS1-5) Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms. (MS-LS3-2) Develop and use a model to describe why asexual

	reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation
	Module: Relationships Within Ecosystems
Topic 1: Cell Processes	(MS-LS1-6) Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms. (MS-LS1-7) Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism.
Topic 2: Ecosystems	(MS-LS2-1) Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem. (MS-LS2-3) Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.
Topic 3: Populations, Communities, and Ecosystems	<ul> <li>(MS-LS2-1) Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.</li> <li>(MS-LS2-2) Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.</li> <li>(MS-LS2-4) Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.</li> <li>(MS-LS2-5) Evaluate competing design solutions for maintaining biodiversity and ecosystem services.</li> </ul>
	Module: Diversity of Life
Topic 1: Genes and Heredity	(MS-LS3-1) Develop and use a model to describe why structural changes to genes (mutations) located on chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the structure and function of the organism. (MS-LS3-2) Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation. (MS-LS4-5) Gather and synthesize information about the technologies that have changed the way humans influence the inheritance of

	desired traits in organisms.
Topic 2: Natural Selection and Change Over Time	<ul> <li>(MS-LS4-1) Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change of life forms throughout the history of life on Earth under the assumption that natural laws operate today as in the past.</li> <li>(MS-LS4-2) Apply scientific ideas to construct an explanation for the anatomical similarities and differences among modern organisms and between modern and fossil organisms to infer evolutionary relationships.</li> <li>(MS-LS4-3) Analyze displays of pictorial data to compare patterns of similarities in the embryological development across multiple species to identify relationships not evident in the fully formed anatomy.</li> <li>(MS-LS4-4) Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals' probability of surviving and reproducing in a specific environment.</li> <li>(MS-LS4-5) Gather and synthesize information about the technologies that have changed the way humans influence the inheritance of desired traits in organisms.</li> <li>(MS-LS4-6) Use mathematical representations to support explanations of how natural selection may lead to increases and decreases of specific traits in populations over time.</li> </ul>

#### Earth and Spaces Sciences

Elevate Science Modules & Topics	NGSS Middle Grades 6-8 Performance Expectations
	Module: Cycles Influencing Weather and Climate
Topic 1: Weather in the Atmosphere	(MS-ESS2-4) Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity. (MS-ESS2-5) Collect data to provide evidence for how the motions and complex interactions of air masses result in changes in weather conditions. (MS-ESS2-6) Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation

	that determine regional climates. (MS-ESS3-2) Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.	
Topic 2: Energy in the Atmosphere and Ocean	(MS-ESS2-6) Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates.	
Topic 3: Climate	(MS-ESS2-6) Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determines regional climates. (MS-ESS3-5) Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.	
	Module: Earth Systems	
Topic 1: Introduction to Earth's Systems	(MS-ESS2-1) Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process	
Topic 2: Minerals and Rocks in the Geosphere	(MS-ESS2-1) Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.	
Topic 3: Plate Tectonics	(MS-ESS2-2) Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales. (MS-ESS2-3) Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions. (MS-ESS3-2) Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.	
Topic 4: History of Earth	(MS-ESS1-4) Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6-billion-year-old history.	
Module: Changing Earth and Human Activity		
Topic 1: Earth's Surface Systems	(MS-ESS2-3) Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions. (MS-ESS2-3) Analyze and interpret data on the distribution of fossils and	

	rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.		
Topic 2: Distribution of Natural Resources	(MS-ESS3-1) Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes.		
Topic 3: Human Impacts on the Environment	(MS-ESS3-3) Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment. (MS-ESS3-4) Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.		
	Module: Earth's Place in the Universe		
Topic 1: Earth-Sun-Moon System	(MS-ESS1-1) Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons.		
Topic 2: Solar System and the Universe	(MS-ESS1-2) Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system. (MS-ESS1-3) Analyze and interpret data to determine scale properties of objects in the solar system.		