

STREAM

Science

Science: Kindergarten

MOTION AND STABILITY: FORCES AND INTERACTIONS

Forces and Motion

- Pushes and pulls can have different strengths and directions.
- Pushing or pulling on an object can change the speed or direction of its motion and can start or stop it.

Types of Interactions

- When objects touch or collide, they push on one another and can change motion.

Relationship Between Energy and Forces

- A bigger push or pull makes things speed up or slow down more quickly.

Defining Engineering Problems

- A situation that people want to change or create can be approached as a problem to be solved through engineering. Such problems may have many acceptable solutions.

ENERGY

Conservation of Energy and Energy Transfer

- Sunlight warms Earth's surface.

FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES

Organization for Matter and Energy Flow in Organisms

- All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow.

EARTH'S SYSTEMS

Weather and Climate

- Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time. People measure these conditions to describe and record the weather and to notice patterns over time.

Biogeology

- Plants and animals can change their environment.

Human Impacts on Earth Systems

- Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things.

EARTH AND HUMAN ACTIVITY

Natural Resources

Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do.

Natural Hazards

Some kinds of severe weather are more likely than others in a given region. Weather scientists forecast severe weather so that the communities can prepare for and respond to these events.

Human Impacts on Earth Systems

Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things.

Defining and Delimiting an Engineering Problem

Asking questions, making observations, and gathering information are helpful in thinking about problems.

Developing Possible Solutions

Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people.

Science: First Grade

WAVES AND THEIR APPLICATIONS IN TECHNOLOGIES FOR INFORMATION TRANSFER

Wave Properties

- Sound can make matter vibrate, and vibrating matter can make sound.

Electromagnetic Radiation

- Objects can be seen if light is available to illuminate them or if they give off their own light.
- Some materials allow light to pass through them, others allow only some light through and others block all the light and create a dark shadow on any surface beyond them, where the light cannot reach.
- Mirrors can be used to redirect a light beam.

Information Technologies and Instrumentation

- People also use a variety of devices to communicate (send and receive information) over long distances.

FROM MOLECULES TO ORGANISMS

Structure and Function

- All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow.

Growth and Development of Organisms

- Adult plants and animals can have young. In many kinds of animals, parents and the offspring themselves engage in behaviors that help the offspring to survive.

Information Processing

- Animals have body parts that capture and convey different kinds of information needed for growth and survival
- Animals respond to these inputs with behaviors that help them survive.
- Plants also respond to some external inputs.

HEREDITY: INHERITANCE AND VARIATION OF TRAITS

Inheritance of Traits

- Young animals are very much, but not exactly like, their parents.
- Plants also are very much, but not exactly, like their parents.

Variation of Traits

- Individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways.

EARTH'S PLACE IN THE UNIVERSE

The Universe and its Stars

- Patterns of the motion of the sun, moon, and stars in the sky can be observed, described, and predicted.

Earth and the Solar System

- Seasonal patterns of sunrise and sunset can be observed, described, and predicted.

Science: Second Grade

MATTER AND ITS INTERACTIONS

Structure and Properties of Matter

- Different kinds of matter exist and many of them can be either solid or liquid, depending on temperature.
- Matter can be described and classified by its observable properties.
- Different properties are suited to different purposes.
- A great variety of objects can be built up from a small set of pieces.

Chemical Reactions

- Heating or cooling a substance may cause changes that can be observed. Sometimes these changes are reversible, and sometimes they are not.

ECOSYSTEMS: INTERACTIONS, ENERGY, AND DYNAMICS

Interdependent Relationships in Ecosystems

- Plants depend on water and light to grow.
- Plants depend on animals for pollination or to move their seeds around.

Developing Possible Solutions

- Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people.

BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY

Biodiversity and Humans

- There are many different kinds of living things in any area, and they exist in different places on land and in water.

EARTH'S PLACE IN THE UNIVERSE

The History of Planet Earth

- Some events happen very quickly; others occur very slowly, over a time period much longer than one can observe.

EARTH'S SYSTEMS

Earth Materials and Systems

- Wind and water can change the shape of the land.

Plate Tectonics and Large-Scale System Interactions

- Maps show where things are located. One can map the shapes and kinds of land and water in any area.

The Roles of Water in Earth's Surface Processes

- Water is found in the ocean, rivers, lakes, and ponds. Water exists as solid ice and in liquid form.

Optimizing the Design Solution

- Because there is always more than one possible solution to a problem, it is useful to compare and test designs.

Science: Third Grade

MOTION AND STABILITY: FORCES AND INTERACTIONS

Forces and Motion

- Each force acts on one particular object and has both strength and a direction. An object at rest typically has multiple forces acting on it, but they add to give zero net force on the object. Forces that do not sum to zero can cause changes in the object's speed or direction of motion.
- The patterns of an object's motion in various situations can be observed and measured; when that past motion exhibits a regular pattern, future motion can be predicted from it.

Types of Interactions

- Objects in contact exert forces on each other.
- Electric, and magnetic forces between a pair of objects do not require that the objects be in contact. The sizes of the forces in each situation depend on the properties of the objects and their distances apart and, for forces between two magnets, on their orientation relative to each other.

FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES

Growth and Development of Organisms

- Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles.

ECOSYSTEMS: INTERACTIONS, ENERGY, AND DYNAMICS

Social Interactions and Group Behavior

- Being part of a group helps animals obtain food, defend themselves, and cope with changes. Groups may serve different functions and vary dramatically in size.

HEREDITY: INHERITANCE AND VARIATION OF TRAITS

Inheritance of Traits

- Many characteristics of organisms are inherited from their parents.
- Other characteristics result from individuals' interactions with the environment, which can range from diet to learning. Many characteristics involve both inheritance and environment.

Variation of Traits

- Different organisms vary in how they look and function because they have different inherited information.
- The environment also affects the traits that an organism develops.

BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY

Ecosystem Dynamics, Functioning, and Resilience

- When the environment changes in ways that affect a place's physical characteristics, temperature, or availability of resources, some organisms survive and reproduce, others move to new locations, yet others move into the transformed environment, and some die.

Evidence of Common Ancestry and Diversity

- Some kinds of plants and animals that once lived on Earth are no longer found anywhere.
- Fossils provide evidence about the types of organisms that lived long ago and also about the nature of their environments.

Natural Selection

- Sometimes the differences in characteristics between individuals of the same species provide advantages in surviving, finding mates, and reproducing.

Adaptation

- For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all.

Biodiversity and Humans

- Populations live in a variety of habitats, and change in those habitats affects the organisms living there.

EARTH'S SYSTEMS

Weather and Climate

- Scientists record patterns of the weather across different times and areas so that they can make predictions about what kind of weather might happen next.
- Climate describes a range of an area's typical weather conditions and the extent to which those conditions vary over years.

EARTH AND HUMAN ACTIVITY

Natural Hazards

- A variety of natural hazards result from natural processes.
- Humans cannot eliminate natural hazards but can take steps to reduce their impacts.

Science: **FOURTH GRADE**

ENERGY

Definitions of Energy

- The faster a given object is moving, the more energy it possesses.
- Energy can be moved from place to place by moving objects or through sound, light, or electric currents.

Conservation of Energy and Energy Transfer

- Energy is present whenever there are moving objects, sound, light, or heat. When objects collide, energy can be transferred from one object to another, thereby changing their motion. In such collisions, some energy is typically also transferred to the surrounding air; as a result, the air gets heated and sound is produced.
- Light also transfers energy from place to place.
- Energy can also be transferred from place to place by electric currents, which can then be used locally to produce motion, sound, heat, or light. Transforming the energy of motion into electrical energy may have produced the currents to begin with.

Relationship Between Energy and Forces

- When objects collide, the contact forces transfer energy so as to change the objects' motions.

Energy in Chemical Processes and Everyday Life

- The expression "produce energy" typically refers to the conversion of stored energy into a desired form for practical use.

WAVES AND THEIR APPLICATIONS IN TECHNOLOGIES FOR INFORMATION TRANSFER

Wave Properties

- Waves, which are regular patterns of motion, can be made in water by disturbing the surface. When waves move across the surface of deep water, the water goes up and down in place; there is no net motion in the direction of the wave except when the water meets a beach.
- Waves of the same type can differ in amplitude (height of the wave) and wavelength (spacing between wave peaks).

Electromagnetic Radiation

- An object can be seen when light reflected from its surface enters the eyes.

Information Technologies and Instrumentation

- Digitized information can be transmitted over long distances without significant degradation. High-tech devices, such as computers or cell phones, can receive and decode information—convert it from digitized form to voice—and vice versa.

Optimizing The Design Solution

- Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints.

FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES

Structure and Function

- Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction.

Information Processing

- Different sense receptors are specialized for particular kinds of information, which may be then processed by the animal's brain. Animals are able to use their perceptions and memories to guide their actions.

EARTH'S PLACE IN THE UNIVERSE

The History of Planet Earth

- Local, regional, and global patterns of rock formations reveal changes over time due to earth forces, such as earthquakes. The presence and location of certain fossil types indicate the order in which rock layers were formed.

EARTH'S SYSTEMS

Earth Materials and Systems

- Rainfall helps to shape the land and affects the types of living things found in a region. Water, ice, wind, living organisms, and gravity break rocks, soils, and sediments into smaller particles and move them around.

Plate Tectonics and Large-Scale System Interactions

- The locations of mountain ranges, deep ocean trenches, ocean floor structures, earthquakes, and volcanoes occur in patterns. Most earthquakes and volcanoes occur in bands that are often along the boundaries between continents and oceans. Major mountain chains form inside continents or near their edges. Maps can help locate the different land and water features areas of Earth.

Biogeology

- Living things affect the physical characteristics of their regions.

EARTH AND HUMAN ACTIVITY

Natural Resources

- Energy and fuels that humans use are derived from natural sources, and their use affects the environment in multiple ways. Some resources are renewable over time, and others are not.

Natural Hazards

- A variety of hazards result from natural processes (e.g., earthquakes, tsunamis, volcanic eruptions). Humans cannot eliminate the hazards but can take steps to reduce their impacts.

Science: FIFTH GRADE

MATTER AND ITS INTERACTIONS

Structure and Properties of Matter

- Matter of any type can be subdivided into particles that are too small to see, but even then the matter still exists and can be detected by other means. A model showing that gases are made from matter particles that are too small to see and are moving freely around in space can explain many observations, including the inflation and shape of a balloon and the effects of air on larger particles or objects.
- The amount (weight) of matter is conserved when it changes form, even in transitions in which it seems to vanish.
- Measurements of a variety of properties can be used to identify materials.

Chemical Reactions

- When two or more different substances are mixed, a new substance with different properties may be formed.
- No matter what reaction or change in properties occurs, the total weight of the substances does not change. (Boundary: Mass and weight do not need to be distinguished at this grade level.)

MOTION AND STABILITY: FORCES AND INTERACTIONS

Types of Interactions

- The gravitational force of Earth acting on an object near Earth's surface pulls that object toward the planet's center.

ENERGY

Energy in Chemical Processes and Everyday Life

- The energy released [from] food was once energy from the sun that was captured by plants in the chemical process that forms plant matter (from air and water).

Organization for Matter and Energy Flow in Organisms

- Food provides animals with the materials they need for body repair and growth and the energy they need to maintain body warmth and for motion.

FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES

Organization for Matter and Energy Flow in Organisms

- Plants acquire their material for growth chiefly from air and water.

ECOSYSTEMS: INTERACTIONS, ENERGY, AND DYNAMICS

Interdependent Relationships in Ecosystems

- The food of almost any kind of animal can be traced back to plants. Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants. Some organisms, such as fungi and bacteria, break down dead organisms (both plants or plants parts and animals) and therefore operate as "decomposers." Decomposition eventually restores (recycles) some materials back to the soil. Organisms can survive only in environments in which their particular needs are met. A healthy ecosystem is one in which multiple species of different types are each able to meet their needs in a relatively stable web of life. Newly introduced species can damage the balance of an ecosystem.

Cycles of Matter and Energy Transfer in Ecosystems

- Matter cycles between the air and soil and among plants, animals, and microbes as these organisms live and die. Organisms obtain gases, and water, from the environment, and release waste matter (gas, liquid, or solid) back into the environment.

EARTH'S PLACE IN THE UNIVERSE

The Universe and its Stars

- The sun is a star that appears larger and brighter than other stars because it is closer. Stars range greatly in their distance from Earth.

Earth and the Solar System

- The orbits of Earth around the sun and of the moon around Earth, together with the rotation of Earth about an axis between its North and South poles, cause observable patterns. These include day and night; daily changes in the length and direction of shadows; and different positions of the sun, moon, and stars at different times of the day, month, and year.

EARTH'S SYSTEMS

Earth Materials and Systems

- Earth's major systems are the geosphere (solid and molten rock, soil, and sediments), the hydrosphere (water and ice), the atmosphere (air), and the biosphere (living things, including humans). These systems interact in multiple ways to affect Earth's surface materials and processes. The ocean supports a variety of ecosystems and organisms, shapes landforms, and influences climate. Winds and clouds in the atmosphere interact with the landforms to determine patterns of weather.

The Roles of Water in Earth's Surface Processes

- Nearly all of Earth's available water is in the ocean. Most fresh water is in glaciers or underground; only a tiny fraction is in streams, lakes, wetlands, and the atmosphere.

EARTH AND HUMAN ACTIVITY

Human Impacts on Earth Systems

- Human activities in agriculture, industry, and everyday life have had major effects on the land, vegetation, streams, ocean, air, and even outer space. But individuals and communities are doing things to help protect Earth's resources and environments.

Standards pulled from Next Generation Science Standards.

NGSS Lead States (2013). Next Generation Science Standards: For States, By States (Standards by DCI). Retrieved from <https://www.nextgenscience.org/overview-dci>

STREAM

Technology

Technology: Grades K-2

- Give credit when using code, music, or pictures (for example) that were created by others.
- Construct programs, to accomplish a task or as a means of creative expression, which include sequencing, events, and simple loops, using a block-based visual programming language, both independently and collaboratively.
- Plan and create a design document to illustrate thoughts, ideas, and stories in a sequential (step-by-step) manner (e.g., story map, storyboard, sequential graphic organizer).
- Use numbers or other symbols to represent data (e.g., thumbs up/down for yes/no, color by number, arrows for direction, encoding/decoding a word using numbers or pictographs).
- Decompose (break down) a larger problem into smaller sub-problems with teacher guidance or independently.
- Categorize a group of items based on the attributes or actions of each item, with or without a computing device.
- Construct and execute algorithms (sets of step-by-step instructions) that include sequencing and simple loops to accomplish a task, both independently and collaboratively, with or without a computing device.
- Analyze and debug an algorithm that includes sequencing and simple loops, with or without a computing device.
- Identify and use software that controls computational devices (e.g. use an app to draw on the screen, use software to write a story or control robots).
- Use appropriate terminology in naming and describing the function of common computing devices and components
- Identify, using accurate terminology, simple hardware and software problems that may occur during use.
- Collect data over time and organize it in a chart or graph in order to make a prediction.
- Use a computing device to store, search, retrieve, modify, and delete information and define the information stored as data.
- Create a model of an object or process in order to identify patterns as essential elements.
- Compare and contrast examples of how computing technology has changed and improved the way people live, work, and interact.
- Use computers or other computing devices to connect with people using a network.
- Use passwords to protect private information and discuss the effects of password misuse.

Technology: Grades 3 to 5

- Apply collaboration strategies to support problem solving within the design cycle of a program.
- Use proper citations and document when ideas are borrowed and changed for their own use.
- Create a plan as part of the iterative design process, both independently and with diverse collaborative teams.
- Construct programs, in order to solve a problem or for creative expression, that include sequencing, events, loops, conditionals, parallelism, and variables, using a block-based visual programming language or text-based language, both independently and collaboratively.
- Use mathematical operations to change a value stored in a variable.
- Decompose a larger problem into smaller sub-problems, independently or in a collaborative group.
- Construct and execute an algorithm that includes sequencing, loops, and conditionals to accomplish a task, both independently and collaboratively, with or without a computing device.
- Analyze and debug an algorithm that includes sequencing, events, loops, conditionals, parallelism, and variables.
- Model how a computer system works. (Only includes basic elements of a computer system, such as input, output, processor, sensors, and storage.)
- Use appropriate terminology, simple hardware and software problems that may occur during use, and apply strategies for solving problems.
- Create a computational artifact to model the attributes and behaviors associated with a concept.
- Answer a question by using a computer to manipulate and analyze data that has been collected by the class or student.
- Use numeric values to represent non-numeric ideas in the computer (binary, ASCII, pixel, attributes such as RGB).
- Evaluate and describe the positive and negative impacts of the pervasiveness of computers and computing in daily life.
- Generate examples of how computing can affect society, and also how societal values can shape computing choices.
- Seek out and compare diverse perspectives, synchronously or asynchronously, to improve a project.
- Brainstorm ways in which computing devices could be made more accessible to all users.
- Explain problems that relate to using computing devices and networks.
- Create examples of strong passwords, explain why strong passwords should be used, and demonstrate proper use and protection of personal passwords.
- Model how a device on a network sends a message from one device (sender) to another (receiver) while following specific rules.

Computer Science Standards Information retrieved through a link on the technology planning toolkit page on the NH Department of Education Website.

CSTA Standards Taskforce. (Grades K-5 Team: Lash, T.; Batista, L.; Ryer, D.; and Sedgwick, V.) [INTERIM] CSTA K-12 COMPUTER SCIENCE STANDARDS (REVISED 2016). Retrieved from http://c.ymcdn.com/sites/www.csteachers.org/resource/resmgr/Docs/Standards/2016StandardsRevision/INTERIM_StandardsFINAL_07222.pdf

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STREAM

Reading

Reading/Language Arts: Kindergarten

READING:

Foundational skills:

- Develop understanding of how print works: following words left to right, top to bottom, and page-by-page
- Develop understanding that spoken words are represented by specific sequences of letters in written language with spaces between words
- Recognize and name all upper-and lowercase letters of the alphabet
- Recognize the form of language such as words, syllables, and sounds (phonemes)
- Recognize and produce rhymes; segment words into syllables and individual sounds; blend sounds into a word;
- Isolate and pronounce the first, last and middle sounds in 3-sound (phoneme) words
- Demonstrate knowledge of how letters and sounds correspond for consonants and vowels when reading words
- Read common high-frequency sight words for kindergarten
- Identify purpose for reading texts

Reading Literature and Informational Texts:

- Ask and answer questions about key details in a text
- Retell stories
- Recognize common types of texts such as storybooks, poems
- Name the author and illustrator of a text
- Ask and answer questions about words
- Compare and contrast the experiences of characters in stories
- Comprehend grade level text
- Read grade level text with speed, accuracy, and expression

WRITING:

- Use pictures, dictation and writing to compose pieces of writing that tell about a topic, a single event or several loosely linked events, or an opinion
- Respond to questions and suggestions from peers to strengthen writing
- Participate in shared research and writing projects
- Use technology to produce, publish and collaborate
- Understand grammar when linking words in writing and speaking

SPEAKING AND LISTENING:

- Participate in a range of collaborative discussions
- Ask and answer questions about key details
- Describe familiar people, places, things, and events with detail
- Express thoughts, feelings, and ideas clearly and audibly

Reading/Language Arts: Grade 1

READING

Print Concepts:

- Demonstrate understanding of the organization and basic features of printed sentences: first word, capitalization, ending punctuation

Phonological Awareness:

- Demonstrate understanding of how sounds work in words:
- Distinguish long from short vowel sounds in spoken single-syllable words
- Orally produce single-syllable words by blending sounds (phonemes)
- Isolate and pronounce initial, medial vowel, and final sounds in spoken single-syllable words
- Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes)

Phonics and Word Recognition Skills:

- Know and apply first grade phonics and word analysis skills in decoding words
- Know the spelling-sound correspondences for common consonant digraphs
- Decode regularly spelled one-syllable words including final-e and common vowel team patterns that represent long vowel sounds
- Decode two-syllable words following basic patterns by breaking words into syllables
- Read words with inflectional endings
- Recognize and read 1st grade irregularly spelled words

Fluency:

- Read grade level text with speed, accuracy, and expression

Reading Literature and Informational Texts:

- Ask and answer questions about key details in a text
- Retell stories, including key details, description of characters, settings, and major events in a story
- Describe the connections between individuals, events, ideas or pieces of information in a text
- Demonstrate understanding of the central message, lesson of a story, or main topic
- Identify words and phrases in stories and poems that suggest feelings and appeal to the senses
- Explain the difference between texts that tell a story and texts that give information
- Identify who is telling the story
- Compare and contrast the experiences of characters in stories or two ideas or pieces of information in a text
- Know and use text features to locate key information: headings, table of contents, glossaries
- Read literature and informational texts appropriately complex for 1st grade

WRITING:

- Produce at least three types of writing:
 - Opinion pieces with a reason for the opinion
 - Informative/explanatory pieces with facts about a topic
 - Narratives with two or more sequenced events and the use of signal/temporal words
- Add details to strengthen writing
- Use technology to produce and publish writing
- Use correct capitalization, punctuation and spelling, appropriate for 1st grade

Reading/Language Arts: Grade 2

READING

Phonics and Word Recognition Skills:

- Know and apply second grade phonics and word analysis skills in decoding words
- Distinguish long and short vowels when reading regularly spelled one-syllable words
- Know spelling-sound correspondences for additional common vowel teams
- Decode regularly spelled two-syllable words with long vowels
- Decode words with common prefixes and suffixes
- Identify words with inconsistent but common spelling-sound correspondences
- Recognize and read second grade irregularly spelled words

Fluency

- Read grade level text with speed, accuracy, and expression

Reading Literature and Informational Texts:

- Ask and answer who, what where, when, why, and how questions to demonstrate understanding of key details in a text
- Retell stories, including fables and folktales from diverse cultures, demonstrating understanding of central message, lesson or moral
- Identify the main topic of a multi-paragraph text
- Identify what the author wants to answer, explain, or describe in the text
- Describe how major characters respond to major events and/or challenges
- Understand points of view of characters, reflected in voice when reading dialogue aloud
- Describe how words and phrases supply rhythm and meaning to a text
- Determine the meaning of words and phrases
- Tell about the structure of a story including the introduction and the conclusion
- Know and use text features to locate key information efficiently such as captions, bold print, subheadings, and glossaries
- Compare and contrast different versions of the same story or important points presented by two texts on the same topic
- Describe the connection between a series of historical events/scientific ideas
- Explain how specific images clarify text
- Read and comprehend grade level literature as well as informational texts such as history/social studies, science and technical texts

WRITING:

- Produce at least three types of writing:
 - Opinion pieces using linking words to connect opinion and reasons
 - Informative/explanatory pieces, using facts and definitions to develop points
 - Narratives with a well-elaborated event or short sequence of events, including details of character thoughts, actions and feelings; use of temporal words to signal order of events
- Strengthen writing as needed by revising and editing
- Use technology to produce and publish writing
- Participate in shared research and writing projects such as recording science observations or reading multiple books on a topic and producing a report

Reading/Language Arts: Grade 3

READING:

Phonics and Word Recognition Skills:

- Know and apply 3rd grade phonics and word analysis skills in decoding words
- Read and understand common prefixes and suffixes
- Decode multisyllabic words
- Read grade-appropriate irregularly spelled words

Fluency:

- Read on-level prose and poetry with speed, accuracy, and expression

Reading Literature and Informational Text:

- Ask and answer questions to demonstrate understanding of a text, citing the text as a basis for answers
- Recount stories, fables, folktales and myths from diverse cultures
- Determine the key message, lesson, moral, or main idea and how it is supported by text details
- Describe character traits, motivations, feelings and how actions contribute to story sequence of events
- Describe the connection between a series of historical events, scientific ideas, or steps in a technical procedure, using language of time, sequence and cause/effect
- Determine the meaning of words and phrases, literal and non-literal, general academic vocabulary and grade 3 subject area words and phrases
- Use text features and search tools to locate information efficiently
- Refer to parts of a text such as chapter, scene, and stanza
- Distinguish point of view from self, narrator, author, and/or characters
- Explain how words and illustrations contribute to understanding of mood, character, setting, details of a text
- Describe logical connection/structure of sentences and paragraphs (cause/effect, sequence, comparison/contrast)
- Read and comprehend grade level literature as well as informational texts such as history/social studies, science and technical texts

WRITING:

- Produce at least three types of writing:
 - Opinion pieces supporting a point of view with reasons and a concluding statement or section
 - Informative/explanatory writing, developing a topic with facts, definitions and details and a concluding statement or section
 - Narrative writing that establishes a situation, introduces a narrator or character, and uses dialogue and description of actions, thoughts and feelings with a sense of closure
- Strengthen writing by planning, revising and editing
- Write routinely for different purposes and audiences

Reading/Language Arts: Grade 4

READING:

Phonics and Word Recognition Skills:

- Know and apply fourth grade phonics and word analysis skills to accurately read unfamiliar multisyllabic words in context and out of context, including:
 - All letter-sound correspondences
 - Syllabication patterns
 - Morphology (roots and affixes)

Fluency:

- Read on-level prose and poetry orally with speed, accuracy, and expression

Reading Literature and Informational Text:

- Cite the text for explicit and inferential responses
- Determine theme from details in a text
- Summarize the text
- Describe in depth a character, setting or event based on text details
- Determine the meaning of words and phrases as they are used in text including general academic vocabulary and fourth grade subject area words and phrases
- Explain structural elements of poems (verse, rhythm, meter), and drama (casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text
- Describe structure of informational text: chronology, comparison, cause/effect, and problem/solution
- Compare/contrast points of view of narrators of different stories
- Understand the difference between first- and third-person narrations
- Describe differences in focus and information provided by author to support particular points in informational text
- Make connections between the text of a story and a visual/oral presentation of the text
- Compare/contrast treatment of similar themes and topics in stories, myths, traditional literature from different cultures, and informational texts
- Read and comprehend grade level literature, including history/social studies, science and technical texts
- Citing information from text, explain events, procedures, ideas in historical, scientific, and technical texts
- Interpret information presented visually, orally, or quantitatively

WRITING:

- Produce at least three types of writing:
 - Opinion pieces supporting a point of view with ideas grouped to support writer's purpose
 - Informative/explanatory writing, developing a topic with facts, definitions, details and quotations in formatted paragraphs, sections, and conclusion; precise language and domain-specific vocabulary supports explanation of a topic
 - Narrative writing that establishes a situation, introduces a narrator or character, and uses dialogue and description of actions, thoughts and feelings with a conclusion; use precise language to convey information
- Strengthen writing by planning, revising and editing

Reading/Language Arts: Grade 5

READING:

Phonics and Word Recognition Skills:

- Know and apply fifth grade phonics and word analysis skills to accurately read unfamiliar multisyllabic words in context and out of context, including:
 - All letter-sound correspondences
 - Syllabication patterns
 - Morphology (roots and affixes)

Fluency:

- Read on-level prose and poetry orally with speed, accuracy, and expression

Reading Literature and Informational Text:

- Quote accurately from text for explicit and inferential responses
- Determine theme of a story or two or more main ideas from details in a text, citing character's responses to challenges and speaker's reflections in poems;
- Summarize text
- Compare/contrast characters, settings, or events from text details
- Determine the meaning of words and phrases, including figurative language, as they are used in text including general academic vocabulary and fifth grade subject area words and phrases
- Explain how chapters, scenes or stanzas provide structure of a story, drama or poem
- Compare/contrast structure of informational text: chronology, comparison, cause/effect, problem /solution in two or more texts
- Analyze multiple accounts of the same event or topic noting similarities and differences in the point of view represented
- Analyze how visual and multimedia elements contribute to meaning, tone and beauty of a text
- Compare/contrast stories in same genre such as mysteries and adventure stories on approaches to similar themes and topics
- Citing information from text, explain interactions between two or more individuals, events, or ideas in historical, scientific, and technical texts
- Explain how author uses reasons and evidence in text to support point(s)
- Integrate information from several texts on the same topic
- Use information from multiple print/digital sources to locate an answer quickly and solve a problem efficiently
- Read and comprehend literature and informational texts with increasing difficulty, including history/social studies, science and technical texts;

WRITING:

- Produce at least three types of writing:
 - Opinion pieces supporting a point of view with ideas logically ordered to support writer's purpose
 - Informative/explanatory writing, developing a topic with facts, definitions, details and quotations in formatted paragraphs, sections, and conclusion; precise language, including clauses, and domain-specific vocabulary to support explanation of a topic
 - Narrative writing that establishes a situation, introduces a narrator or character, and uses dialogue, pacing, and description of actions, thoughts and feelings with a conclusion; use precise language to convey information;
- Strengthen writing by planning, revising and editing

STREAM

Engineering

Engineering: Kindergarten

EARTH AND HUMAN ACTIVITY

Connections to Engineering, Technology, and Applications of Science Interdependence of Science, Engineering, and Technology

- People encounter questions about the natural world every day.

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.

ENGINEERING DESIGN

Defining and Delimiting Engineering Problems

- A situation that people want to change or create can be approached as a problem to be solved through engineering.
- Asking questions, making observations, and gathering information are helpful in thinking about problems.
- Before beginning to design a solution, it is important to clearly understand the problem.

Developing Possible Solutions

- Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people.

Optimizing the Design Solution

- Because there is always more than one possible solution to a problem, it is useful to compare and test designs.

Engineering: First Grade

WAVES AND THEIR APPLICATIONS IN TECHNOLOGIES FOR INFORMATION TRANSFER

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.

FROM MOLECULES TO ORGANISMS

Connections to Engineering, Technology, and Applications of Science

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

- Every human-made product is designed by applying some knowledge of the natural world and is built using materials derived from the natural world

ENGINEERING DESIGN

Defining and Delimiting Engineering Problems

- A situation that people want to change or create can be approached as a problem to be solved through engineering.
- Asking questions, making observations, and gathering information are helpful in thinking about problems. ETS1
- Before beginning to design a solution, it is important to clearly understand the problem.

Developing Possible Solutions

- Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people.

Optimizing the Design Solution

- Because there is always more than one possible solution to a problem, it is useful to compare and test designs.

Engineering: Second Grade

MATTER AND ITS INTERACTIONS

Connections to Engineering, Technology, and Applications of Science

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

- Every human-made product is designed by applying some knowledge of the natural world and is built using materials derived from the natural world.

EARTH'S SYSTEMS

Connections to Engineering, Technology, and Applications of Science

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

- Developing and using technology has impacts on the natural world.

ENGINEERING DESIGN

Defining and Delimiting Engineering Problems

- A situation that people want to change or create can be approached as a problem to be solved through engineering.
- Asking questions, making observations, and gathering information are helpful in thinking about problems.
- Before beginning to design a solution, it is important to clearly understand the problem.

Developing Possible Solutions

- Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people.

Optimizing the Design Solution

- Because there is always more than one possible solution to a problem, it is useful to compare and test designs.

Engineering: Third Grade

MOTION AND STABILITY: FORCES AND INTERACTIONS

Connections to Engineering, Technology, and Applications of Science

Interdependence of Science, Engineering, and Technology

- Scientific discoveries about the natural world can often lead to new and improved technologies, which are developed through the engineering design process.

BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY

Connections to Engineering, Technology, and Applications of Science

Interdependence of Science, Engineering, and Technology

- Knowledge of relevant scientific concepts and research findings is important in engineering.

EARTH AND HUMAN ACTIVITY

Connections to Engineering, Technology, and Applications of Science

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

- Engineers improve existing technologies or develop new ones to increase their benefits (e.g., better artificial limbs), decrease known risks (e.g., seatbelts in cars), and meet societal demands (e.g., cell phones).

ENGINEERING DESIGN

Defining and Delimiting Engineering Problems

- Possible solutions to a problem are limited by available materials and resources (constraints). The success of a designed solution is determined by considering the desired features of a solution (criteria). Different proposals for solutions can be compared on the basis of how well each one meets the specified criteria for success or how well each takes the constraints into account.

Developing Possible Solutions

- Research on a problem should be carried out before beginning to design a solution. Testing a solution involves investigating how well it performs under a range of likely conditions.
- At whatever stage, communicating with peers about proposed solutions is an important part of the design process, and shared ideas can lead to improved designs.
- Tests are often designed to identify failure points or difficulties, which suggest the elements of the design that need to be improved.

Optimizing the Design Solution

- Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints.

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

- People's needs and wants change over time, as do their demands for new and improved technologies.
- Engineers improve existing technologies or develop new ones to increase their benefits, decrease known risks, and meet societal demands.

Engineering: Fourth Grade

ENERGY

Defining Engineering Problems

- Possible solutions to a problem are limited by available materials and resources (constraints). The success of a designed solution is determined by considering the desired features of a solution (criteria). Different proposals for solutions can be compared on the basis of how well each one meets the specified criteria for success or how well each takes the constraints into account.

Connections to Engineering, Technology, and Applications of Science

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

- Engineers improve existing technologies or develop new ones.

WAVES AND THEIR APPLICATIONS IN TECHNOLOGIES FOR INFORMATION TRANSFER

Connections to Engineering, Technology, and Applications of Science

Interdependence of Science, Engineering, and Technology

- Knowledge of relevant scientific concepts and research findings is important in engineering.

EARTH AND HUMAN ACTIVITY

Designing Solutions to Engineering Problems

- Testing a solution involves investigating how well it performs under a range of likely conditions.

Connections to Engineering, Technology, and Applications of Science

Interdependence of Science, Engineering, and Technology

- Knowledge of relevant scientific concepts and research findings is important in engineering.

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

- Over time, people's needs and wants change, as do their demands for new and improved technologies.
- Engineers improve existing technologies or develop new ones to increase their benefits, to decrease known risks, and to meet societal demands

ENGINEERING DESIGN

Defining and Delimiting Engineering Problems

- Possible solutions to a problem are limited by available materials and resources (constraints). The success of a designed solution is determined by considering the desired features of a solution (criteria). Different proposals for solutions can be compared on the basis of how well each one meets the specified criteria for success or how well each takes the constraints into account.

Developing Possible Solutions

- Research on a problem should be carried out before beginning to design a solution. Testing a solution involves investigating how well it performs under a range of likely conditions.
- At whatever stage, communicating with peers about proposed solutions is an important part of the design process, and shared ideas can lead to improved designs.
- Tests are often designed to identify failure points or difficulties, which suggest the elements of the design that need to be improved.

Optimizing the Design Solution

- Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints.

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

- People's needs and wants change over time, as do their demands for new and improved technologies. -
- Engineers improve existing technologies or develop new ones to increase their benefits, decrease known risks, and meet societal demands.

Engineering: Fifth Grade

ENGINEERING DESIGN

Defining and Delimiting Engineering Problems

- Possible solutions to a problem are limited by available materials and resources (constraints). The success of a designed solution is determined by considering the desired features of a solution (criteria). Different proposals for solutions can be compared on the basis of how well each one meets the specified criteria for success or how well each takes the constraints into account.

Developing Possible Solutions

- Research on a problem should be carried out before beginning to design a solution. Testing a solution involves investigating how well it performs under a range of likely conditions.
- At whatever stage, communicating with peers about proposed solutions is an important part of the design process, and shared ideas can lead to improved designs.
- Tests are often designed to identify failure points or difficulties, which suggest the elements of the design that need to be improved.

Optimizing the Design Solution

- Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints.

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

- People's needs and wants change over time, as do their demands for new and improved technologies.
- Engineers improve existing technologies or develop new ones to increase their benefits, decrease known risks, and meet societal demands.

Engineering standards pulled from Next Generation Science Standards.

NGSS Lead States (2013). Next Generation Science Standards: For States, By States (Standards by DCI). Retrieved from <https://www.nextgenscience.org/overview-dci>

STREAM

Arts

ARTS

NATIONAL CORE ARTS STANDARDS: ANCHOR STANDARDS

Creating

Conceiving and developing new artistic ideas and work

- Generate and conceptualize artistic ideas and work
- Organize and develop artistic ideas and work
- Refine and complete artistic ideas and work

Performing/ Presenting/ Producing

Performing:

Realizing artistic ideas and work through interpretation and presentation

Presenting:

Interpreting and sharing artistic work

Producing:

Realizing and presenting artistic ideas and work

- Analyze, interpret and select artistic work for presentation
- Develop and refine artistic techniques and work for presentation
- Convey meaning through the presentation of artistic work

Responding

Understanding and evaluating how the arts convey meaning

- Perceive and analyze artistic work
- Interpret intent and meaning in artistic work
- Apply criteria to evaluate artistic work

Connecting

Relating artistic ideas and work with personal meaning and external context

- Synthesize and relate knowledge and personal experiences to make art
- Relate artistic ideas and works with societal, cultural, and historical context to deepen understanding

Portions of this work are based on the National Core Arts Standards

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Arts Educators teaching in any art discipline (dance, media arts, music, theatre, and visual arts) and teachers in public and private education (PreK-12, higher education, educational outreach centers of performing arts organizations, and community/cultural arts centers) may duplicate the standards as they appear on the NCCAS website without having to request permission from SEADAE.

STREAM

Mathematics

Mathematics: Kindergarten

Counting and Cardinality

- Know number names and the count sequence
- Count to 100 by ones and tens
- Count to tell the number of objects and write numbers from 0-20
- Compare numbers

Operations and Algebraic Thinking

- Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
- Add and subtract within 10 using objects and drawings

Number and Operations in Base Ten

- Work with numbers 11-19 to gain foundations for place value

Measurement and Data

- Describe and compare measurable attributes such as length or weight
- Classify objects and count the number of objects in categories

Geometry

- Identify and describe shapes, number of sides, and number of corners
- Analyze, compare, create, and compose shapes

Mathematics: Grade 1

Operations and Algebraic Thinking:

- Represent and solve problems involving addition and subtraction within 20
- Understand and apply properties of operations such as commutative property and associative property of addition
- Work with addition and subtraction equations

Number and Operations in Base Ten:

- Count to 120, starting at any number less than 120
- Read and write numerals
- Represent a number of objects with a written numeral
- Understand place value: Two digits in a two-digit number represent amounts of tens and ones
- Add within 100
- Understand that in adding a two-digit number, one adds tens and tens and ones and ones, sometimes composing a ten
- Given a two-digit number, mentally find 10 more or 10 less without counting
- Subtract multiples of 10 in the range 10-90

Measurement and Data:

- Measure lengths indirectly, comparing the length of two objects by using a third object
- Understand that length measurement of an object is the number of same-size length units that span it with no gaps or overlaps
- Tell and write time in hours and half-hours
- Ask and answer how many more or less questions about data from up to three categories with data points

Geometry

- Define attributes of 2-D and 3-D shapes, finding halves and fourths of shapes

Mathematics: Grade 2

Operations and Algebraic Thinking:

- Represent and solve problems involving addition and subtraction within 100 to solve one- and two-step word problems
- Fluently add and subtract within 20 using mental strategies
- By end of second grade, know from memory all sums of two one-digit numbers
- Work with equal groups of objects to gain foundations for multiplication

Number and Operations in Base Ten:

- Understand place value and use this understanding when adding and subtracting
- Understand that a three-digit number represents an amount of hundreds, tens and ones
- Count within 1000, including skip counting by 5s, 10s, and 100s
- Read and write numbers to 1000
- Compare two three-digit numbers based on meanings of the hundreds, tens and ones digits ($>$, $<$, $=$)
- Fluently add and subtract within 100
- Add and subtract within 1000 using concrete models, drawings, and strategies

Measurement and Data:

- Measure and estimate lengths in standard units: inches, feet, centimeters, and meters
- Relate addition and subtraction to length that are given in the same units
- Work with time: tell and write time to the nearest five minutes, a.m.-p.m.
- Solve word problems involving money: dollar bills, quarters, dimes, nickels and pennies, using \$ and ¢ appropriately
- Use a bar graph and picture graph with up to four categories representing data

Geometry:

- Reason with shapes and their attributes
- Identify triangles, quadrilaterals, pentagons, hexagons and cubes
- Partition circles and rectangles into two, three or four equal shares and use the words, halves, thirds, fourths

Mathematics: Grade 3

Operations and Algebraic Thinking:

- Represent and solve problems involving multiplication and division
- Use multiplication and division within 100 to solve word problems involving equal groups, arrays and measurement quantities
- Understand properties of multiplication and the relationship between multiplication and division (commutative, associative, distributive properties)
- Multiply and divide within 100
- Know from memory all products of two one-digit numbers
- Solve two-step word problems using the four operations

Number and Operations in Base Ten:

- Use place value understanding and properties of operations to perform multi-digit arithmetic
- Fluently add and subtract within 1000
- Multiply one-digit whole numbers by multiples of 10 in 10-90 range

Number and Operations with Fractions:

- Develop understanding of fractions as numbers, including representation on a number line
- Understand equivalence of fractions, including visual fraction models
- Compare two fractions, recording the results using $>$, $<$, $=$

Measurement and Data:

- Solve problems involving measurement and estimation of intervals of time (minutes), liquid volumes (liters), and mass (grams, kilograms)
- Draw and use scaled bar graphs to represent data
- Measure length using rulers marked with halves and fourths of an inch

Geometric Measurement:

- Understand concepts of area and relate area to multiplication and addition
- Solve perimeter problems of polygons

Geometry:

- Reason with shapes and their attributes

Mathematics: Grade 4

Operations and Algebraic Thinking:

- Use the four operations with whole numbers to solve problems
- Gain familiarity with factors and multiples
- Generate and analyze patterns

Number and Operations in Base Ten:

- Generalize place value understanding for multi-digit whole numbers
- Read and write multi-digit whole numbers using base-ten numerals, number names and expanded form; use $>$, $<$, $=$ symbols for comparison
- Perform multi-digit arithmetic using place value understanding and properties of operations, including understanding of dividing to find quotients
- Fluently add and subtract multi-digit whole numbers using standard algorithm
- Multiply a whole number (up to four digits) by a one-digit whole number
- Multiply two two-digit numbers

Number and Operations with Fractions:

- Extend understanding of fraction equivalence and ordering
- Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers
- Understand decimal notation for fractions, and compare decimal fractions
- Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit
- Represent and interpret data

Geometric Measurement:

- Understand concepts of angle and measure angles

Geometry:

- Draw and identify lines and angles, and classify shapes by properties of their lines and angles

Mathematics: Grade 5

Operations and Algebraic Thinking:

- Write and interpret numerical expressions using parentheses, brackets, or braces
- Analyze patterns and relationships

Number and Operations in Base Ten:

- Understand the place value system in multi-digit numbers
- Explain patterns in the number of zeros when multiplying by powers of 10
- Read, write and compare decimals to thousandths
- Fluently multiply multi-digit whole numbers using the standard algorithm
- Find whole-number quotients with up to four-digit dividends and two-digit divisors
- Add, subtract, multiply and divide decimals to hundredths

Number and Operations with Fractions:

- Use equivalent fractions as a strategy to add and subtract fractions
- Apply and extend previous understandings of multiplication and division to multiply and divide fractions

Measurement and Data:

- Convert like measurement units within a given measurement system
- Represent and interpret data

Geometric Measurement:

- Understand concepts of volume and relate volume to multiplication and to addition;
- Recognize volume as additive
- Understand that a 1-unit by 1-unit by 1-unit cube is the standard unit for measuring volume

Geometry:

- Graph points on the coordinate plane to solve real-world mathematical problems
- Classify two-dimensional figures into categories based on their properties

Standards written based on information retrieved from <http://www.corestandards.org/Math/>

STREAM

Social Studies

Social Studies: Grades K-2

Civics and Governments

- Compare rules of the classroom to the rules of the United States
- Identify documents and symbols of the US Government: bald eagle, Pledge of Allegiance
- Identify basic purposes of state and national government
- Evaluate the effectiveness and fairness of rules and laws at the school level
- Explain that the world is divided into different countries
- Describe ways in which countries interact with each other culturally
- Describe why it is important for countries to work together to resolve issues
- Examine the responsibilities of individuals as members of a family, school, and community
- Discuss ways individuals can be involved in their community

Economics

- Define good and services, producers and consumers
- Describe the steps and materials needed to make a product
- Distinguish between needs and wants
- Identify the characteristics of money
- Describe basic services banks or other financial institutions provide to consumers, savers, borrowers, and businesses
- Define the term resources

Geography

- Identify the characteristics and purposes of globes and maps
- Introduce spatial information on maps and other geographic representations
- Identify major physical and human features in the US and on Earth
- Explore the physical and human characteristics of place
- Recognize that areas of the Earth's surface share unifying geographic characteristics
- Observe the ways in which different people perceive places
- Investigate how the Earth-Sun relationship affects our daily lives
- Explore the components and distribution of ecosystems
- Explore the distribution of a population
- Identify what are natural resources
- Recognize the role of natural resources in daily life
- Investigate how people use resources

US/NH History

- Identify national and NH celebrations, monuments, symbols, and documents
- Recognize that the world is interconnected
- Identify individuals and/or groups who have profoundly affected life in the US
- Explore art, music, and literature of various time periods
- Recognize that groups have enhanced art, music, and literature of our nation
- Identify different segments of the US economy
- Identify how the lives of women and children have changed over time in our country
- Identify the concept of diversity

World History

- Recognize that people of different countries have different social and political systems
- Explore ways that societies around the world express themselves artistically
- Identify the concepts of values and beliefs

Social Studies: Grades 3-4

Civics and Government

- Explain the ideal of the US system of government
- Analyze how government addresses social, political, and geographic issues
- Identify the individual functions of the three branches of government and the organization of the NH state government
- Explain how law and/or policies are made at local and state levels
- Explain that the world is divided into different countries with their own governments and that all governments are not the same
- Describe the rights of citizens as outlined by the Constitutions of NH and the US

Economics

- Identify the factors of production and explain how businesses use these to produce goods and services
- Describe what markets are and define individual's roles as consumers and producers in a market economy using circular flow models
- Explain how decisions by consumers and producers affect and are affected by the economy
- Describe why most jobs today require greater specialization and result in greater productivity
- Explain why needs and wants are unlimited while resources are limited
- Explain why scarcity requires individuals, households, businesses and governments to make economic choices and how economic choices always involve an opportunity cost
- Describe different ways individuals, households, businesses, and governments make economic decisions
- Define supply and demand and describe factors that can cause a change in supply and demand
- Explain how prices of goods and services are set in the US and describe different factors that affect price
- Illustrate cycles of economic growth and decline
- Describe how changes in the business cycle can impact people's lives
- Describe different methods people use to exchange goods and services
- Identify goods and services provided by local government
- Describe that countries have different kinds of resources
- Explain why some countries' resources are in greater demand than others
- Explain that trade between countries involves imports and exports and the reasons why countries trade

Geography

- Identify and describe the characteristics and purposes of geographic tools
- Display spatial information on maps and other geographic representations
- Locate major physical and human features in the US and on Earth
- Illustrate that places and features are distributed spatially across Earth's surface
- Recognize the causes and consequences of spatial interaction on Earth's surface
- Describe the physical and human characteristics of places
- Recognize how physical and human processes together shape places
- Generalize the concept of region as an area of Earth's surface with unifying geographic characteristics
- Illustrate the ways in which regions change
- Compare and contrast the ways in which different people perceive places

- Illustrate the components of the Earth's physical systems
- Demonstrate how physical processes shape features of Earth's surface
- Describe how the Earth-Sun relationship affects conditions on Earth.
- Recognize the components and distribution of ecosystems
- Investigate how humans interact with ecosystems
- Recognize the distribution of population and its underlying causes
- Describe the types and historical patterns of human migration
- Evaluate the effects of migration on the characteristics of places
- Analyze the spatial patterns of settlement in different regions of the world
- Illustrate how people modify the physical environment
- Examine the ways in which the physical environment provides opportunities or limitations
- Examine the effects of the use of renewable and nonrenewable resources on human systems
- Describe the role of natural resources in daily life
- Compare how people in different regions use the same resource

US/NH History

- Explore biographies of key political figures who helped shape our community, state, and country
- Trace the political development of NH governance
- Describe the significance of national and NH celebrations, monuments, symbols, and documents
- Describe the interconnectedness of the world developed using examples
- Explore how individuals' ideals have profoundly affected life in the US
- Explore how art, music, and literature often reflect and/or influence major ideas, values, and conflicts of particular time periods
- Explore how groups have enhanced the art, music and literature of our nation
- Explore major developments and changes in economic productivity
- Explore the impact of important technological inventions
- Investigate the evolution of the US economy
- Explain the unique contributions of different ethnic and religious groups to NH history and culture
- Describe the impact of major national and state events on everyday life
- Trace the changes in the roles and lives of women and children and their impact on society
- Explore attitudes towards diversity
- Describe the reasons why various groups have come to the US

World History

- Explain that people of different countries create social and political systems
- Explain how events or global issues affect interactions between countries
- Describe ways that societies around the world express themselves artistically through forms
- Explore how improvements in agriculture enhance human survival using examples
- Describe different ways that societies around the world express their values and beliefs through practices

Social Studies: Grades 5-6

Civics and Governments

- Apply the ideals and principles of the American system of government to historic and contemporary examples
- Identify the core ideals and principles of American government by citing documents
- Apply criteria for evaluating the effectiveness and fairness of rules and laws at the local, state, or federal levels
- Differentiate among the major forms of limited and unlimited governments
- Illustrate ways in which government in the US is founded on the conviction that Americans are united by the principles they share
- Identify and illustrate the heritage that early settlers brought to the development and establishment of American democracy
- Identify other countries in the world and their different forms of government
- Describe ways in which countries interact with each other culturally, economically, diplomatically, or militarily
- Discuss the reasons for conflicts between and among countries and peoples
- Evaluate those characteristics that promote good citizenship

Economics

- Identify the role of the individual in factor and product markets
- Explain how specialization and productivity are related
- Recognize the relationship between productivity and wages, and between wages and standard of living
- Determine the opportunity cost of decisions
- Identify the factor of production
- Recognize that shortage and surplus affect the price and availability of goods and services
- Describe gross domestic product and its components
- Recognize the effects of inflation on people under different circumstances

Geography

- Translate mental maps into appropriate graphics to display geographic information and answer geographic questions
- Apply the spatial concepts of location, distance, direction, scale, movement, and region
- Utilize maps, globes, graphs, charts, models, and databases to analyze spatial distributions and patterns
- Describe the ways in which regions change
- Describe how places and regions preserve culture
- Describe how physical processes shape patterns in the physical environment
- Identify the components of Earth's physical system
- Illustrate how physical processes produce changes in ecosystems
- Explain how human activities influence changes in ecosystems
- Recognize the demographic structure of a population and its underlying causes
- Know the types and historical patterns of human migration
- Understand the effects of movement on the characteristics of places
- Analyze the spatial patterns of settlement
- Know the functions, sizes, and spatial arrangements of settlement
- Understand the consequences of human modification of the physical environment
- Examine the role of technology in the human modification of the physical environment
- Appreciate how characteristics of different physical environments provide opportunities human activities or place constraints on human activities
- Assess why people have different viewpoints regarding resource use

US/NH History

- Explain how and why people have developed forms of self government
- Explain how the foundation of American democracy are rooted in European, Native American, and colonial traditions, experiences, and institutions
- Examine how the art, music, and literature of our nation has been enhanced by groups
- Demonstrate an understanding of major developments and changes in American economic productivity
- Evaluate the importance of technological inventions and inventors and their impact on American life
- Demonstrate an understanding of how westward movement led to personal opportunities and a more diverse economy as seen in events
- Explain the impact ethnic and religious groups have had on the development of the US
- Describe the impact of major national and state events on everyday life
- Examine changes in the roles and lives of women and their impact on society
- Describe similarities and differences in the immigrant experience for various ethnic groups

World History

- Describe different types of political systems created by people
- Explore the use and abuse of power
- Describe the impact of land and water routes on trade
- Explore the spread and impact of ideas and technology
- Describe major migrations
- Examine how military encounters have led to cultural exchange
- Differentiate the spread of world religions
- Explore the development of education and its impact on societies
- Analyze the impact of the agricultural revolution on humans using examples
- Understand the tensions over land use between settled farmers and nomadic herders using examples
- Analyze the impact of inventions and new technologies on the agricultural systems using examples
- Trace improvements in communication
- Trace the rise and impact of cities on daily life
- Understand how societies have educated their members
- Explain the impact of ethnic and religious groups on the development and stability of empires and nation states
- Examine the forms of entertainment and leisure time activity
- Describe the types of families that various societies have created

Based on the K-12 Social Studies New Hampshire Curriculum Framework (2006) Information retrieved from https://www.education.nh.gov/instruction/curriculum/social_studies/documents/frameworks.pdf