

CAMP INVENTION® FARM TECH™ ALIGNED TO COMMON CORE STATE STANDARDS AND NEXT GENERATION SCIENCE STANDARDS

KEY CONCEPTS

- Agriculture utilizes innovation and high-tech equipment.
- John Deere invented the first American steel plow, boosting farm productivity.
- Code is a programming language that consists of a system of words, letters, figures, numbers, or symbols arranged in a pattern that creates a distinct reaction.
- Fertilizers add nutrients such as nitrogen and ammonia to the soil, which are essential for optimal plant growth; polluting chemicals in soil harm plant growth.
- Inventions can include technologies to clean up environmental pollution, such as EZVI invented by National Inventors Hall of Fame Inductee Jackie Quinn.
- Hydrophobic substances repel water due to their chemical properties and are useful in waterproofing and removing pollution.
- A circuit connects a power source to an electronic object to provide energy that powers the object.
- Entrepreneurship encompasses invention, innovation, economics, business, and marketing principles.
- Compost is decaying plant matter used for fertilizer.
- Budgeting and saving money for future expenses is a wise business practice and allows for future growth.
- The law of supply and demand in economics states that the price of a commodity can, in part, be determined by the amount of product available to consumers (supply) and the number of consumers that wish to buy the product (demand).
- Plants differ on what nutrients they take out of and add to the soil, making it advantageous to pair crops together that compliment each other's growth, and separate noncompatible crops, which hinder each other's growth.
- Modern farms program machines to plant seeds in rows.
- Plants rely on pollination—the transfer of pollen from one flower's anther to another flower's stigma—to make seeds and reproduce.
- Pollination can be carried out passively by wind blowing pollen, or actively by pollinating animals such as bees, butterflies, and bats collecting and depositing pollen as they visit flowers to feed.
- Design engineering is developing practical solutions to real-world problems using insights from a variety disciplines.
- Invasive species are nonnative animals or plants that harm the local natural ecosystem.
- Once crops are grown, farmers must harvest them to earn money.
- Auctions are a sale open to the public where goods are sold to the person who bids the highest.
- Many inventors become entrepreneurs in order to bring their inventions to market.
- DNA, the building block of life, can be found in all cells and structural changes (mutations) to it can result in genetic diseases.
- Tools and technology help to simplify and reduce manual labor.
- Gravity is a downward force that acts on objects.
- Altering the force applied to an object changes its acceleration and velocity.
- Changing the angle and distance of a launching device alters a projectile's trajectory.
- Cows are mammals, which make milk to feed their young.
- Farmers can earn money by raising livestock.
- One primary use of a structure is to protect its inhabitants.
- Materials can be arranged geometrically, taking into account shapes and angles, to create structures.
- Predators—animals that eat other animals—and prey—animals that are eaten by other animals—are essential components that live in balance in a healthy ecosystem.
- Livestock need protection from outside predators as well as from each other in close living conditions.

- Technology can help save lives.
- An invention can be developed for one use and be altered to give it a completely different use.
- Grass grows rapidly under ideal water and light conditions and must be mowed to be maintained.
- Depositing earned money in a bank account can help it grow and protect it.
- A cash cow is a business that provides a steady profit.

OBJECTIVES

Children will:

- Receive a high-tech agricultural robot, hear about one of the pioneers in farm technology—National Inventors Hall of Fame Inductee John Deere, and discover how modern farms are incorporating more innovative technologies.
- Program their robot (Bot ANN-E) to reach an egg, hatch it, and receive Moola and form teams based on the animal inside.
- Discuss healthy soil, polluted soil, and National Inventors Hall of Fame Inductee Jackie Quinn’s invention of EZVI— a clean up technology.
- Explore the technology behind Quinn’s invention using hydrophobic sand.
- Sketch in their Inventor Log and build a device to remove pollutants from soil in preparation for planting.
- Purchase items including LEDs and motors from the Farm Tech Store using earned Moola.
- Discuss entrepreneurship and earn Moola by throwing a tomato splat ball at Compost posters.
- Save Moola in Piggy Banks and see their business grow towards becoming a Cash Cow.
- Explore the concepts of Supply and Demand, throwing a tomato at a supply and demand graph to determine what crops they will grow on their farm.
- Discuss crop compatibility and how it influences planting (Intermediates).
- Design a farm plot on kraft paper.
- Program Bot-ANN-E to plant the seeds.
- Explore the concepts, animals, and wing shapes involved in pollination and build a prototype of a flying pollinating device.
- Pollinate their crops with their devices.
- Harvest the crops, search for an invasive species, and eradicate it once found.
- Save Moola in Piggy Banks and see their business grow towards becoming a Cash Cow.
- Attend a Cattle Auction and purchase cattle with their Moola.
- Receive a message about the farm work ethic from the inventor of methods to make synthetic DNA and successful entrepreneur—National Inventors Hall of Fame Inductee Marvin Caruthers.
- Perform a mock gel electrophoresis on “cow DNA samples” to determine if they might develop a genetic disease.
- Race to build hay-launching devices to feed their cows and then milk them, scoring Moola.
- Earn more Moola by throwing a tomato splat ball at Compost posters.
- Save Moola in Piggy Banks and see their business grow towards becoming a Cash Cow.
- Purchase pigs with their Moola and program ANN-E to knock down pieces of timber, making a Pig Pen to corral the pigs.
- Discuss predators and prey and protection from other farm animals.
- Hear from Collegiate Inventors Competition Winners Team SwineTech about their piglet-saving invention.
- Build an innovative device to protect their livestock.
- Earn Moola by throwing a tomato splat ball at Compost posters.
- Save Moola in Piggy Banks and see their business grow towards becoming a Cash Cow.
- Discover the agricultural-based history of the Flexible Flyer Sled invented by National Inventors Hall of Fame Inductee Samuel Leeds Allen and modern lawn mower invented by National Inventors Hall of Fame Inductee Lewis Miller.
- Race each other in a mock sledding lawn-mower race while trying to avoid automatic sprinklers.
- Earn Moola by throwing a tomato splat ball at Compost posters.
- Program Bot-ANN-E to drive to the Bank, park, and deposit the Moola.
- Achieve their goal of growing a Cash Cow farm business.

FARM TECH™ ALIGNED TO NEXT GENERATION SCIENCE STANDARDS K-6

KINDERGARTEN - GRADE TWO

K-2-ETS1 ENGINEERING DESIGN

- K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.
- K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

GRADE THREE - FIVE

3-5-ETS1 ENGINEERING DESIGN

- 3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.
- 3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.
- 3-5-ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

GRADE SIX - EIGHT

MS-ETS1 ENGINEERING DESIGN

- MS-ETS1-1. Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.

KINDERGARTEN

K-PS2 MOTION AND STABILITY: FORCES AND INTERACTIONS

- K-PS2-1. Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.
- K-PS2-2. Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.

K-LS1 FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES

- K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.

K-ESS3 EARTH AND HUMAN ACTIVITY

- K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.
- K-ESS3-3. Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

GRADE ONE

1-LS1 FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES

- 1-LS1-1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

GRADE TWO

2-LS4 BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY

- 2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.

2-ESS2 EARTH'S SYSTEM

- 2-ESS2-2. Develop a model to represent the shapes and kinds of land and bodies of water in an area.

2-PS1 MATTER AND ITS INTERACTIONS

- 2-PS1-1. Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.
- 2-PS1-2. Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.

2-LS2 ECOSYSTEMS: INTERACTIONS, ENERGY, AND DYNAMICS

- 2-LS2-2. Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

2-LS4 BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY

- 2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.

GRADE THREE

3-PS2 MOTION AND STABILITY: FORCES AND INTERACTIONS

- 3-PS2-1. Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.
- 3-PS2-2. Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.

3-LS3 HEREDITY: INHERITANCE AND VARIATION OF TRAITS

- 3-LS3-1. Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.

3-LS4 BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY

- 3-LS4-3. Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.
- 3-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.

GRADE FOUR

4-LS1 FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES

- 4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

GRADE FIVE

5-PS2 MOTION AND STABILITY: FORCES AND INTERACTIONS

- 5-PS2-1. Support an argument that the gravitational force exerted by Earth on objects is directed down.

5-PS1 MATTER AND ITS INTERACTIONS

- 5-PS1-4. Conduct an investigation to determine whether the mixing of two or more substances results in new substances.

5-ESS3 EARTH AND HUMAN ACTIVITY

- 5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

GRADE SIX

MS-PS1 MATTER AND ITS INTERACTIONS

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.

MS-PS2 MOTION AND STABILITY: FORCES AND INTERACTIONS

- 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.

MS-LS1 FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES

- MS-LS1-4. Use argument 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-LS2 ECOSYSTEMS: INTERACTIONS, ENERGY, AND DYNAMICS

- 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.
- MS-LS2-5. Evaluate competing design solutions for maintaining biodiversity and ecosystem services.

MS-LS3 HEREDITY: INHERITANCE AND VARIATION OF TRAITS

- 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-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.
- MS-LS4-5. Gather and synthesize information about the technologies that have changed the way humans influence the inheritance of desired traits in organisms.

MS-LS4 BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY

- 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.

MS-ESS2 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.

MS-ESS3 EARTH AND HUMAN ACTIVITY

- MS-ESS3-2. Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development.
- MS-ESS3-3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

FARM TECH™ ALIGNED TO COMMON CORE STATE STANDARDS FOR MATHEMATICS K-6

KINDERGARTEN

GEOMETRY K.G

Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

- K.G3. Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”). Analyze, compare, create, and compose shapes.
- K.G4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).
- K.G5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.

MEASUREMENT AND DATA K.MD

Describe several measurable attributes of a single object.

- KMD2. Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.

GRADE ONE

MEASUREMENT AND DATA 1.MD Represent and interpret data.

- 1.MD4. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

GEOMETRY 1.G

Reason with shapes and their attributes.

- 1.G1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.
- 1.G2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.

GRADE TWO

NUMBER AND OPERATIONS IN BASE TEN 2.NBT

Understand place value.

- 2.NBT1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:
 - a. 100 can be thought of as a bundle of ten tens — called a “hundred.”
 - b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

Use place value understanding and properties of operations to add and subtract.

- 2.NBT5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
- 2.NBT8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.

MEASUREMENT AND DATA 2.MD

Work with time and money.

- 2MD8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have? Represent and interpret data.

GRADE THREE

NUMBER AND OPERATIONS IN BASE TEN 3.NBT

Use place value understanding and properties of operations to perform multi-digit arithmetic.

- 3.NBT2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

GRADE FOUR

NUMBER AND OPERATIONS IN BASE TEN 4.NBT

Use place value understanding and properties of operations to perform multi-digit arithmetic.

- 4.NBT4. Fluently add and subtract multi-digit whole numbers using the standard algorithm.

GEOMETRY 4.G

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

- 4.G1. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.

MEASUREMENT AND DATA 4.MD

Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

- 4.MD2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

GRADE FIVE

GEOMETRY 5.G

Graph points on the coordinate plane to solve real-world and mathematical problems.

- 5G1. Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).

GRADE SIX

STATISTICS AND PROBABILITY 6.SP

Develop understanding of statistical variability.

- 6SP2. Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.

STATISTICS AND PROBABILITY 6.SP

Develop understanding of statistical variability.

- 6SP2. Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.
- b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.
- 6.SP4. Display numerical data in plots on a number line, including dot plots, histograms, and box plots.

FARM TECH™ ALIGNED TO COMMON CORE STATE STANDARDS FOR ENGLISH LANGUAGE ARTS K-6

READING STANDARDS FOR LITERATURE RL

KINDERGARTEN

- RL7. With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).

GRADE TWO

- RL7. Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.

GRADE FOUR

- RL7. Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.

READING STANDARDS FOR INFORMATIONAL RI

GRADE ONE

- RI5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.
- RI6. Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.

GRADE TWO

- RI3. Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.
- RI5. Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.

GRADE THREE

- RI7. Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).

GRADE FOUR

- RI7. Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

GRADE FIVE

- RI7. Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.

GRADE SIX

- RI7. Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.

WRITING STANDARDS W

KINDERGARTEN

- W8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

GRADE ONE

- W8. With guidance and support from adults, recall information from experiences or gather information from provided

sources to answer a question.

GRADE TWO

- W8. Recall information from experiences or gather information from provided sources to answer a question.

SPEAKING AND LISTENING STANDARDS SL

KINDERGARTEN

- SL1. Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.
 - a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).
 - b. Continue a conversation through multiple exchanges.
- SL2. Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
- SL3. Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
- SL4. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
- SL5. Add drawings or other visual displays to descriptions as desired to provide additional detail.

GRADE ONE

- SL1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.
 - a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).
 - b. Build on others' talk in conversations by responding to the comments of others through multiple exchanges.
 - c. Ask questions to clear up any confusion about the topics and texts under discussion.
- SL2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
- SL3. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.
- SL5. Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.

GRADE TWO

- SL1. Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.
 - a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
 - b. Build on others' talk in conversations by linking their comments to the remarks of others.
 - c. Ask for clarification and further explanation as needed about the topics and texts under discussion.
- SL3. Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.

GRADE THREE

- SL1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.
 - b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
 - c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.

d. Explain their own ideas and understanding in light of the discussion.

- SL2. Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- SL3. Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.

GRADE FOUR

- SL1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.
 - b. Follow agreed-upon rules for discussions and carry out assigned roles.
 - c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.
 - d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.

GRADE FIVE

- SL1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.
 - b. Follow agreed-upon rules for discussions and carry out assigned roles.
 - c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
 - d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

GRADE SIX

- SL1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.
 - c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.
- SL2. Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.

LITERACY IN SCIENCE AND TECHNICAL SUBJECTS RST

GRADE SIX

- RST3. Follow precisely a multi-step procedure when carrying out experiments, taking measurements, or performing technical tasks.

READING IN SCIENCE AND TECHNICAL SUBJECTS (RST)

- 6-8.R.ST Cite specific textual evidence to support analysis of science and technical texts.
- 6-8.R.ST.3 Key Ideas and Details: Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.
- 6-8.R.ST.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.