COURSE/SUBJECT: Science **LEVEL/GRADE**: 5th

UNIT/FOCUS: Mixtures and Solutions **TIMEFRAME:** 12 Weeks

Transfer

Students will be able to independently use their learning to…

- Develop a model to describe phenomena. (5-PS1-1)
- Conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered. (5-PS1-4)
- Make observations and measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon. (5-PS1-3)
- Measure and graph quantities such as weight to address scientific and engineering questions and problems. (5-PS1-2)
- Define a simple design problem that can be solved through the development of an object, tool, process, or system and includes several criteria for success and constraints on materials, time, or cost. (3-5-ETS1-1)
- Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered. (3-5-ETS1-3)
- Generate and compare multiple solutions to a problem based on how well they meet the criteria and constraints of the design problem. (3-5-ETS1-2)

Meaning

Enduring Understandings (EUs)

Students will understand that…

- Cause and effect relationships are routinely identified, tested, and used to explain change. (5-PS1-4)
- Natural objects exist from the very small to the immensely large. (5-PS1-1)
- Standard units are used to measure and describe physical quantities such as weight, time, temperature, and volume. (5-PS1- 2),(5-PS1-3)
- Scientific Knowledge Assumes an Order and Consistency in Natural Systems Science assumes consistent patterns in natural systems. (5-PS1-2)
- People's needs and wants change over time, as do their demands for new and improved technologies. (3- 5-ETS1-1)
- Engineers improve existing technologies or develop new ones to increase their benefits, decrease known risks, and meet societal demands. (3-5-ETS1-2)

Essential Questions (EQs)

Students will keep considering…

- How do particles combine to form the variety of matter one observes?
- How do substances combine or change (react) to make new substances? How does one characterize and explain these reactions and make predictions about them?
- What is a design for?
- What are the criteria and constraints of a successful solution?
- What is the process for developing potential design solutions?
- How can the various proposed design solutions be compared and improved?

Acquisition

Knowledge

Skills

COURSE/SUBJECT: Science **LEVEL/GRADE**: 5th

Students will know…	*Students will be able to…*
• 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. (5-PS1-1) • The amount (weight) of matter is conserved when it changes form, even in transitions in which it seems to vanish. (5-PS1-2) • Measurements of a variety of properties can be used to identify materials. (Boundary: At this grade level, mass and weight are not distinguished, and no attempt is made to define the unseen particles or explain the atomic-scale mechanism of evaporation and condensation.) (5-PS1-3) • 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. (3-5-ETS1-1) • 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. (3-5-ETS1-2) • 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. (3-5-ETS1-2) • Tests are often designed to identify failure points or difficulties, which suggest the elements of the design that need to be improved. (3-5-ETS1-3) • Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints. (3-5-ETS1-3)	• 5-PS1-1. Develop a model to describe that matter is made of particles too small to be seen. • 5-PS1-2. Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved. • 5-PS1-3. Make observations and measurements to identify materials based on their properties. • 5-PS1-4. Conduct an investigation to determine whether the mixing of two or more substances results in new substances. • 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 improve.

COURSE/SUBJECT: Science **LEVEL/GRADE**: 5th

Aligned Concepts, Topics, and Skills

Topics:
- Measurement of Length, Mass and Volume for Matter
- Conservation of Mass
- Properties of Matter
- Mixing Substances

Phenomena / Engineering Scenario:
- Construct a model of matter made up of particles too small to be seen
- Ice expands when it melts
- Ice cube melts in a glass of water
- Density mystery bottle
- Sugar was added to my tea and it is no longer there but the tea tastes sweet

Pacing Guide

- Approximately 2 weeks per investigation

21st Century Life and Career Ready Practices

- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP3. Attend to personal health and financial well-being.
- CRP4. Communicate clearly and effectively and with reason.
- CRP5. Consider the environmental, social and economic impacts of decisions.
- CRP6. Demonstrate creativity and innovation.
- CRP7. Employ valid and reliable research strategies.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP9. Model integrity, ethical leadership and effective management.
- CRP10. Plan education and career paths aligned to personal goals.
- CRP11. Use technology to enhance productivity.
- CRP12. Work productively in teams while using cultural global competence.

Interdisciplinary Connections

- Science and Engineering Practices
- Cross-Cutting Concepts

Instructional Resources

- FOSS Kits
- FOSS Science Resource Books
- FOSS Online Activities

Benchmark / Summative Assessments

- Investigations
  - Separating Mixtures
  - Developing Models
  - Concentration
  - Reaching Saturation
  - Fizz Quiz
- I-Checks
- Self-Assessments
- FOSS Post Test

COURSE/SUBJECT: Science **LEVEL/GRADE**: 5th

Supports / Modifications for ELLs	Supports / Modifications for Students w/ 504s and or IEPs
• Preview content • Utilize visuals, images, actions, and talk • Scaffold development of comprehension process vocabulary AND content-specific vocabulary • Display anchor charts for language structures • Provide assessments with graphic supports • Utilize prepared sentence stems • Graphic organizers • Flexible grouping • Additional time for processing and assessment	• Differentiate content, process, product, and learning environment • Provide alternative or high interest text at student's reading level. • Provide summaries of materials for student. • Shorten assignments and assessments to focus on mastery of key concepts. • Substitute alternatives for written assignments. • Specify and review often exactly what the student will need to learn to pass. • Modify expectations based on student needs. • Provide a "designated notetaker" or photocopy of other student or teacher notes. • Provide a print copy of assignments or notes. • Go over directions orally. • Provide additional time on tests. • Read test materials to the student, and allow oral responses. • Use enlarged graph paper to write problems to help the student keep numbers in columns. • Break long-term assignments into small steps, with daily monitoring and frequent grading. • Use both oral and printed directions.
Supports / Modifications for At Risk Students	**Supports / Modifications for Gifted & Talented Students**
• Review the classroom rules frequently. • Evaluate classroom structure against the student's needs (flexible structure, firm limits, etc.). • Keep workspace clear of unrelated materials. • Keep classroom quiet during intense learning times. • Reduce visual distractions in the classroom (mobiles, etc.). • Seat the student close to the teacher / instruction, and away from distractions. • Keep extra supplies of classroom materials (pencils, books) on hand. • Alert student several minutes before a transition from one activity to another is planned; give several reminders. • Reinforce (often) when a student displays positive behavior. • Develop an individualized behavior intervention plan that consistent with the student's ability and skills. • Arrange for a student to leave the classroom for a designated "safe place" when highly stressed. • Develop a system or a code word to let a student know when behavior is not appropriate. • Ignore behaviors that are not seriously disruptive.	• Provide opportunities to pursue advanced level work • Expose students to higher level thinking skills • Provide enrichment centers • pursue a self-selected interest • work in groups with students having common interests • move to a higher grade for specific subject area instruction • work with students of comparable ability across classrooms at the same grade level • work on an advanced curriculum unit on a teacher-selected topic • participate in competitive programs focusing on thinking skills/problem solving • receive concentrated instruction in critical thinking and creative problem solving

COURSE/SUBJECT: Science **LEVEL/GRADE**: 5th

UNIT/FOCUS: Living Systems **TIMEFRAME:** 12 Weeks

Transfer

Students will be able to independently use their learning to…

- Ask questions about what would happen if a variable is changed.
- Identify limitations of models.
- Collaboratively develop and/or revise a model based on evidence that shows the relationships among variables for frequent and regular occurring events.
- Develop and/or use models to describe and/or predict phenomena.
- Use a model to test cause and effect relationships or interactions concerning the functioning of a natural or designed system.
- Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered.
- Make observations and/or measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon or test a design solution.
- Make predictions about what would happen if a variable changes.
- Represent data in tables and/or various graphical displays (bar graphs, pictographs, and/or pie charts) to reveal patterns that indicate relationships.
- Analyze and interpret data to make sense of phenomena, using logical reasoning, mathematics, and/or computation.
- Compare and contrast data collected by different groups in order to discuss similarities and differences in their findings.
- Describe, measure, estimate, and/or graph quantities such as area, volume, weight, and time to address scientific and engineering questions and problems.
- Use evidence (e.g., measurements, observations, patterns) to construct or support an explanation or design a solution to a problem.
- Identify the evidence that supports particular points in an explanation.
- Construct and/or support an argument with evidence, data, and/or a model.
- Read and comprehend grade-appropriate complex texts and/or other reliable media to summarize and obtain scientific and technical ideas and describe how they are supported by evidence.
- Obtain and combine information from books and/or other reliable media to explain phenomena or solutions to a design problem.
- Communicate scientific and/or technical information orally and/or in written formats, including various forms of media and may include tables, diagrams, and charts.

Meaning

Enduring Understandings (EUs)

Students will understand that…

- Similarities and differences in patterns can be used to sort, classify, communicate and analyze simple rates of change for natural phenomena and designed products.
- Natural objects and/or observable phenomena exist from the very small to the immensely large or from very short to very long time periods.
- Standard units are used to measure and describe physical quantities such as weight, time, temperature, and volume.
- A system is a group of related parts that make up a whole and can carry out functions its individual parts cannot.
- A system can be described in terms of its components and their interactions.
- Matter flows and cycles can be tracked in terms of the weight of the substances before and after a process occurs. The total weight of the substances does not change. This is what is meant by conservation of matter.
- Energy is transported into, out of, and within systems.
- Energy can be transferred in various ways and between objects.
- Substructures have shapes and parts that serve functions.
- Change is measured in terms of differences over time and may occur at different rates.
- Some systems appear stable, but over long periods of time will eventually change.

Essential Questions (EQs)

Students will keep considering…

- How do organisms live, grow, respond to their environment, and reproduce?
- How do organisms detect, process, and use information about the environment?
- How do organisms interact with the living and nonliving environments to obtain matter and energy?
- How do matter and energy move through an ecosystem?
- How do food and fuel provide energy?
- If energy is conserved, why do people say it is produced or used?
- How do Earth's major systems interact?
- How do humans change the planet?

COURSE/SUBJECT: Science **LEVEL/GRADE**: 5th

Acquisition	
Knowledge	Skills
Students will know… • 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 (secondary to 5-PS3-1). • Plants acquire their material for growth chiefly from air and water (5-LS1-1). • 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. • 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. (5-LS2-1) • 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. (5-LS2-1) • The expression "produce energy" typically refers to the conversion of stored energy into a desired form for practical use. • 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) (5-PS3-1). • 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. (5-ESS2-1) • 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. (5-ESS3-1)	*Students will be able to…* • Support an argument that plants get the materials they need for growth chiefly from air and water. • Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways. • Use a model to describe the movement of matter among plants, animals, decomposers, and the environment. • Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun. • Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact. • Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment

COURSE/SUBJECT: Science **LEVEL/GRADE**: 5th

Aligned Concepts, Topics, and Skills

Topics:

- Everyday Systems
- Earth Systems
- Kelp Forest Food Web
- Yeast Nutrition
- Plant Nutrition
- Animal Nutrition
- Plant Vascular Systems
- Circulatory Systems
- Respiratory Systems
- Stimulus Response
- Attention
- Instinct and Learning
- Ecosystems

Pacing Guide

- Approximately 2 weeks per investigation

21st Century Life and Career Ready Practices

- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP3. Attend to personal health and financial well-being.
- CRP4. Communicate clearly and effectively and with reason.
- CRP5. Consider the environmental, social and economic impacts of decisions.
- CRP6. Demonstrate creativity and innovation.
- CRP7. Employ valid and reliable research strategies.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP9. Model integrity, ethical leadership and effective management.
- CRP10. Plan education and career paths aligned to personal goals.
- CRP11. Use technology to enhance productivity.
- CRP12. Work productively in teams while using cultural global competence.

Interdisciplinary Connections

- Science and Engineering Practices
- Cross-Cutting Concepts
- Math problem of the week
- Research sugars in products
- Write about making syrup
- Write caption for pictures
- Jump rope

Instructional Resources

- FOSS Kits
- FOSS Science Resource Books
- FOSS Online Activities

Benchmark / Summative Assessments

- Investigations
  - Systems
  - Nutrient Systems
  - Transport Systems
  - Sensory Systems
- I-Checks
- Self-Assessments
- FOSS Post Test

COURSE/SUBJECT: Science **LEVEL/GRADE**: 5th

Supports / Modifications for ELLs	Supports / Modifications for Students w/ 504s and or IEPs
• Preview content • Utilize visuals, images, actions, and talk • Scaffold development of comprehension process vocabulary AND content-specific vocabulary • Display anchor charts for language structures • Provide assessments with graphic supports • Utilize prepared sentence stems • Graphic organizers • Flexible grouping • Additional time for processing and assessment	• Differentiate content, process, product, and learning environment • Provide alternative or high interest text at student's reading level. • Provide summaries of materials for student. • Shorten assignments and assessments to focus on mastery of key concepts. • Substitute alternatives for written assignments. • Specify and review often exactly what the student will need to learn to pass. • Modify expectations based on student needs. • Provide a "designated notetaker" or photocopy of other student or teacher notes. • Provide a print copy of assignments or notes. • Go over directions orally. • Provide additional time on tests. • Read test materials to the student, and allow oral responses. • Use enlarged graph paper to write problems to help the student keep numbers in columns. • Break long-term assignments into small steps, with daily monitoring and frequent grading. • Use both oral and printed directions.
Supports / Modifications for At Risk Students	**Supports / Modifications for Gifted & Talented Students**
• Review the classroom rules frequently. • Evaluate classroom structure against the student's needs (flexible structure, firm limits, etc.). • Keep workspace clear of unrelated materials. • Keep classroom quiet during intense learning times. • Reduce visual distractions in the classroom (mobiles, etc.). • Seat the student close to the teacher / instruction, and away from distractions. • Keep extra supplies of classroom materials (pencils, books) on hand. • Alert student several minutes before a transition from one activity to another is planned; give several reminders. • Reinforce (often) when a student displays positive behavior. • Develop an individualized behavior intervention plan that consistent with the student's ability and skills. • Arrange for a student to leave the classroom for a designated "safe place" when highly stressed. • Develop a system or a code word to let a student know when behavior is not appropriate. • Ignore behaviors that are not seriously disruptive.	• Provide opportunities to pursue advanced level work • Expose students to higher level thinking skills • Provide enrichment centers • pursue a self-selected interest • work in groups with students having common interests • move to a higher grade for specific subject area instruction • work with students of comparable ability across classrooms at the same grade level • work on an advanced curriculum unit on a teacher-selected topic • participate in competitive programs focusing on thinking skills/problem solving • receive concentrated instruction in critical thinking and creative problem solving

COURSE/SUBJECT: Science **LEVEL/GRADE**: 5th

UNIT/FOCUS: Earth and Sun **TIMEFRAME:** 12 Weeks

Transfer

Students will be able to independently use their learning to…

- Represent data in graphical displays (bar graphs, pictographs and/or pie charts) to reveal patterns that indicate relationships.(5-ESS1-2)
- Support an argument with evidence, data, or a model. (5- PS2-1),(5-ESS1-1)
- Define a simple design problem that can be solved through the development of an object, tool, process, or system and includes several criteria for success and constraints on materials, time, or cost. (3-5-ETS1-1)
- Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered. (3-5-ETS1-3)
- Generate and compare multiple solutions to a problem based on how well they meet the criteria and constraints of the design problem. (3-5-ETS1-2)

Meaning

Enduring Understandings (EUs)	Essential Questions (EQs)
Students will understand that…	*Students will keep considering…*
• Similarities and differences in patterns can be used to sort, classify, communicate and analyze simple rates of change for natural phenomena (5- ESS1-2). • Cause and effect relationships are routinely identified and used to explain change (5-PS2-1). • Natural objects exist from the very small to the immensely large. (5-ESS1- 1) • People's needs and wants change over time, as do their demands for new and improved technologies. (3- 5-ETS1-1) • Engineers improve existing technologies or develop new ones to increase their benefits, decrease known risks, and meet societal demands. (3-5-ETS1-2)	• How can one predict an object's continued motion, changes in motion, or stability? • What is the universe, and what goes on in stars? • What are the predictable patterns caused by Earth's movement in the solar system? • How do Earth's major systems interact? • How do humans depend on Earth's resources? • What is a design for? • What are the criteria and constraints of a successful solution? • What is the process for developing potential design solutions? • How can the various proposed design solutions be compared and improved?

COURSE/SUBJECT: Science **LEVEL/GRADE**: 5th

Acquisition	
Knowledge	Skills
Students will know… • The gravitational force of Earth acting on an object near Earth's surface pulls that object toward the planet's center. (5-PS2-1) • 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. (5-ESS3-1) • 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. (5-ESS1-1) • 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. (5-ESS1-2) • 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. (5-ESS2-1) • 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. (5-ESS2-2) • 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. (3-5-ETS1-1) • 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. (3-5-ETS1-2) • 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. (3-5-ETS1-2) • Tests are often designed to identify failure points or difficulties, which suggest the elements of the design that need to be improved. (3-5-ETS1-3) • Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints. (3-5-ETS1-3)	*Students will be able to…* • 5-PS2-1. Support an argument that the gravitational force exerted by Earth on objects is directed down. • 5-ESS1-1. Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from Earth. • 5-ESS1-2. Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky. • 5-ESS2-1: Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact. • 5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment • 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 improve

COURSE/SUBJECT: Science **LEVEL/GRADE**: 5th

Aligned Concepts, Topics, and Skills

Topics:
- Gravitational Force
- Observable Patterns
- The Sun
- Distances of stars

Phenomena / Engineering Scenario:
- The Sun disappears in the evening/night
- Some stars are brighter than others
- My shadow is longer in the morning then it is at night
- I see Orion in the winter but it isn't in the sky in the summer

Pacing Guide

Approximately 3 weeks per investigation

21st Century Life and Career Ready Practices

- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP3. Attend to personal health and financial well-being.
- CRP4. Communicate clearly and effectively and with reason.
- CRP5. Consider the environmental, social and economic impacts of decisions.
- CRP6. Demonstrate creativity and innovation.
- CRP7. Employ valid and reliable research strategies.
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- CRP9. Model integrity, ethical leadership and effective management.
- CRP10. Plan education and career paths aligned to personal goals.
- CRP11. Use technology to enhance productivity.
- CRP12. Work productively in teams while using cultural global competence.

Interdisciplinary Connections

- Science and Engineering Practices
- Cross-Cutting Concepts

Instructional Resources

- FOSS Kits
- FOSS Science Resource Books
- FOSS Online Activities

Benchmark / Summative Assessments

- Investigations
  - Sun and Earth
  - Planetary Systems
  - Earth's Atmosphere
  - Heating Earth
  - Water Planet
- I-Checks
- Self-Assessments
- FOSS Post Test

COURSE/SUBJECT: Science **LEVEL/GRADE**: 5th

Supports / Modifications for ELLs	Supports / Modifications for Students w/ 504s and or IEPs
• Preview content • Utilize visuals, images, actions, and talk • Scaffold development of comprehension process vocabulary AND content-specific vocabulary • Display anchor charts for language structures • Provide assessments with graphic supports • Utilize prepared sentence stems • Graphic organizers • Flexible grouping • Additional time for processing and assessment	• Differentiate content, process, product, and learning environment • Provide alternative or high interest text at student's reading level. • Provide summaries of materials for student. • Shorten assignments and assessments to focus on mastery of key concepts. • Substitute alternatives for written assignments. • Specify and review often exactly what the student will need to learn to pass. • Modify expectations based on student needs. • Provide a "designated notetaker" or photocopy of other student or teacher notes. • Provide a print copy of assignments or notes. • Go over directions orally. • Provide additional time on tests. • Read test materials to the student, and allow oral responses. • Use enlarged graph paper to write problems to help the student keep numbers in columns. • Break long-term assignments into small steps, with daily monitoring and frequent grading. • Use both oral and printed directions.
Supports / Modifications for At Risk Students	**Supports / Modifications for Gifted & Talented Students**
• Review the classroom rules frequently. • Evaluate classroom structure against the student's needs (flexible structure, firm limits, etc.). • Keep workspace clear of unrelated materials. • Keep classroom quiet during intense learning times. • Reduce visual distractions in the classroom (mobiles, etc.). • Seat the student close to the teacher / instruction, and away from distractions. • Keep extra supplies of classroom materials (pencils, books) on hand. • Alert student several minutes before a transition from one activity to another is planned; give several reminders. • Reinforce (often) when a student displays positive behavior. • Develop an individualized behavior intervention plan that consistent with the student's ability and skills. • Arrange for a student to leave the classroom for a designated "safe place" when highly stressed. • Develop a system or a code word to let a student know when behavior is not appropriate. • Ignore behaviors that are not seriously disruptive.	• Provide opportunities to pursue advanced level work • Expose students to higher level thinking skills • Provide enrichment centers • pursue a self-selected interest • work in groups with students having common interests • move to a higher grade for specific subject area instruction • work with students of comparable ability across classrooms at the same grade level • work on an advanced curriculum unit on a teacher-selected topic • participate in competitive programs focusing on thinking skills/problem solving • receive concentrated instruction in critical thinking and creative problem solving