Bay Head Elementary School	Science Pacing Guide
Content Area: Science **Course Title:** Science	**Grade Level:** Third Grade
Unit Plan 1 Motion and Stability: Forces and Interactions	September (19 days)
Unit Plan 2 From Molecules to Organisms: Structures and Processes	October (23 days)
Unit Plan 3 Ecosystems: Interactions, Energy, and Dynamics	November - December (32 days)
Unit Plan 4 Heredity: Inheritance and Variation of Traits	January (21 days)
Unit Plan 5 Biological Evolution: Unity and Diversity	February - March (41 days)
Unit Plan 6 Earth's Systems	April (16 days)
Unit Plan 7 Earth and Human Activity	May (20 days)
Unit Plan 8 Engineering Design	September - June (ongoing)
Maria Wills, Curriculum Coach Aligned to New Jersey Student Learning Standards	Board Approved: May 28, 2019 Re-Adopted October 22, 2019 Revised: March 22, 2023

Bay Head Elementary School
Curriculum
Unit Overview

Content Area: Science Unit 1 **Grade Level:** Third Grade

Domain (Unit Title): 3-PS2 Motion and Stability: Forces and Interactions

Unit Summary: In this unit of study, students determine the effects of balanced and unbalanced forces on the motion of an object. The crosscutting concepts of *patterns and cause and effect* are called out as organizing concepts for these disciplinary core ideas. Students are expected to demonstrate grade-appropriate proficiency in *planning and carrying out investigations*. Students are also expected to use these practices to demonstrate an understanding of the core ideas.

Primary Interdisciplinary Connections:

- **ELA/Literacy-**
  - RI.3.1 Ask and answer questions, and make relevant connections to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
  - RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text using language that pertains to time, sequence, and cause and effect.
  - RI.3.8 Describe the logical connection between particular sentences and paragraphs in a text (eg., comparison, cause/effect, first/second/third in a sequence).
  - W.3.7 Conducts short research topics that build knowledge about a topic
  - W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories
  - SL.3.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.
- **Mathematics-**
  - MP.2 Reason abstractly and quantitatively.
  - MP.5 Use appropriate tools strategically.
  - 3.MD.A.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

Computer Science and Design Thinking Standards:

- 8.1.5.DA.1: Collect, organize, and display data in order to highlight relationships or support a claim.

- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.
- 8.1.5.DA.5: Propose cause and effect relationships, predict outcomes, or communicate ideas using data.

Career Readiness, Life Literacies, and Key Skills Standards:

- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.IML.6: Use appropriate sources of information from diverse sources, contexts, disciplines, and cultures to answer questions (e.g., RI.5.7, 6.1.5.HistoryCC.7, 7.1.NM. IPRET.5).
- 9.4.5.IML.7: Evaluate the degree to which information meets a need including social emotional learning, academic, and social (e.g., 2.2.5. PF.5)

UNIT 1:

Standards/Learning Targets

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. [Clarification Statement: Examples could include an unbalanced force on one side of a ball can make it start moving; and, balanced forces pushing on a box from both sides will not produce any motion at all.] [Assessment Boundary: Assessment is limited to one variable at a time: number, size, or direction of forces. Assessment does not include quantitative force size, only qualitative and relative. Assessment is limited to gravity being addressed as a force that pulls objects down.]

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. [Clarification Statement: Examples of motion with a predictable pattern could include a child swinging in a swing, a ball rolling back and forth in a bowl, and two children on a see-saw.] [Assessment Boundary: Assessment does not include technical terms such as period and frequency.]

3-PS2-3. Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other. [Clarification Statement: Examples of an electric force could include the force on hair from an electrically charged balloon and the electrical forces between a charged rod and pieces of paper; examples of a magnetic force could include the force between two permanent magnets, the force between an electromagnet and steel paper clips, and the force exerted by one magnet versus the force exerted by two magnets. Examples of cause and effect relationships could include how the distance between objects affects the strength of the force and how the orientation of magnets affects the direction of the magnetic force.] [Assessment Boundary: Assessment is limited to forces produced by objects that can be manipulated by students, and electrical interactions are limited to static electricity.]

3-PS2-4. Define a simple design problem that can be solved by applying scientific ideas about magnets.* [Clarification Statement: Examples of problems could include constructing a latch to keep a door shut and creating a device to keep two moving objects from touching each other.]

Performance Expectations

Science and Engineering Practices

Asking Questions and Defining Problems
Asking questions and defining problems in grades 3–5 builds on grades K–2 experiences and progresses to specifying qualitative relationships.

- Ask questions that can be investigated based on patterns such as cause and effect relationships. (3-PS2-3)
- Define a simple problem that can be solved through the development of a new or improved object or tool. (3-PS2-4)

Planning and Carrying Out Investigations
Planning and carrying out investigations to answer questions or test solutions to problems in 3–5 builds on K–2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.

- 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-PS2-1)
- 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. (3-PS2-2)

Science Knowledge is Based on

Disciplinary Core Ideas

PS2.A: 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. (Boundary: Qualitative and conceptual, but not quantitative addition of forces are used at this level.) (3-PS2-1)
- 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. (Boundary: Technical terms, such as magnitude, velocity, momentum, and vector quantity, are not introduced at this level, but the concept that some quantities need both size and direction to be described is developed.) (3-PS2-2)

PS2.B: Types of Interactions

- Objects in contact exert forces on each other. (3-PS2-1)
- 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 depends on the properties

Empirical Evidence ● Science findings are based on recognizing patterns. (3-PS2-2) **Scientific Investigations Use a Variety of Methods** ● Science investigations use a variety of methods, tools, and techniques. (3-PS2-1)	of the objects and their distances apart and, for forces between two magnets, on their orientation relative to each other. (3-PS2-3),(3-PS2-4)

Crosscutting Concepts	**Learning Objectives**
Patterns ● Patterns of change can be used to make predictions. (3-PS2-2) **Cause and Effect** ● Cause and effect relationships are routinely identified. (3-PS2-1) ● Cause and effect relationships are routinely identified, tested, and used to explain change. (3-PS2-3) **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. (3-PS2-4)	Students will understand that … ● The effect of unbalanced forces on an object results in a change of motion. ● Patterns of motion can be used to predict future motion. Some forces act through contact, some forces act even when objects are not in contact. ● The gravitational force of Earth acting on an object near Earth's surface pulls that object toward the planet's center. ● The effect of unbalanced forces on an object results in a change of motion. ● Patterns of motion can be used to predict future motion. ● Some forces act through contact, some forces act even when objects are not in contact.

Evidence of Learning

Formative Assessments

- Multiple Choice Tests
- Weekly Tests
- Writer's Workshop
- Class Discussion
- Graphic Organizers
- Reading Responses
- Learning Response Log
- Exit Slips
- Kinesthetic Assessments
- Running Records
- Constructive Quizzes
- Rubric
- Cooperative Learning
- Teacher Conferences
- Teacher Observation
- Journals/Writer's Notebook
- Portfolio
- Individual Whiteboards
- Peer/Self Assessments
- Whiteboard Assessments
- Think-Pair-Share
- Literature Circles

Summative Assessments

- Writer's Workshop/Conferencing
- Pretest, Test and Daily Work
- Final Drafts
- Showcase Portfolio
- Reading Assessment/Running Records
- Oral Presentation
- Reflective journal

Benchmark Assessments

- AIMSWeb Testing (Fall, Winter, Spring)
- End of Unit Test or Chapter Test

Alternative Assessments

- Collaborative testing.
- Student portfolios
- Performance Tests
- Conferencing

Performance Tasks/Use of Technology

Performance Tasks

- Classwork
- Projects

Use of Technology

- Laptops or iPads
- Smartboard
- STEAM Lab

Modifications (Special Education, Gifted and Talented, ELLs)

IEP modifications:

- Leveled Guided Reading Books
- Paired partner reading
- Literacy Projects
- Student choice for publication
- Differentiated Instruction/Layered Curriculum/Tiered Lessons
- Books on tape
- Preferential seating
- Scriber for students who can't write
- Computer Based Programs (i.e., Study Island, Learnia, KidBiz, Accelerated Reader, Core K-12)

504 Modification Plan:

- After school tutoring
- Constant parental contact
- Extra time for completion of work
- Possible partial credit
- Graphic organizers
- More/less time as appropriate
- Modified writing assignment lengths
- Timelines and checkpoints
- Small group instruction as needed
- Anchor activities
- Instructional technology as needed/required
- Appropriate scaffolding provided as necessary

- Anchor charts
- Guided notes
- Preferential seating

Gifted and Talented:

- ask open-ended questions
- encourage upper level intellectual behavior based on Bloom's Taxonomy (analyzing, evaluating, creating)

http://edorigami.wikispaces.com/Bloom's+Digital+Taxonomy

- do not always be explicit, allow for discovery
- use centers and group students according to ability or interest
- propose interest-based extension activities
- use leveled texts and offer an advanced reader reading list
- ask "why" and "what if" questions
- use varied modes of pre-assessment and assessment

English Language Learners:

- Visuals
- Gesturing
- Miming and roleplay
- Use of realia and manipulatives
- Simplified lange/teacher talk/thinking aloud
- Personal word walls
- Introducing key vocabulary before lesson
- Small group instruction
- Providing a student buddy

Bay Head Elementary School Curriculum
Unit Overview

Content Area: Science Unit 2 **Grade Level:** Third Grade

Domain (Unit Title): 3-LS1 From Molecules to Organisms: Structures and Processes

Unit Summary: In this unit of study, students develop an understanding of the similarities and differences in organisms' life cycles. In addition, students use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing. The crosscutting

concepts of *patterns* and *cause and effect* are called out as organizing concepts for these disciplinary core ideas. Students demonstrate grade-appropriate proficiency in *developing and using models and constructing explanations and designing solutions*. Students are also expected to use these practices to demonstrate an understanding of the core ideas.

Primary Interdisciplinary Connections:

- **ELA/Literacy-**
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  - RI.3.8 Describe the logical connection between particular sentences and paragraphs in a text (eg., comparison, cause/effect, first/second/third in a sequence).
  - W.3.7 Conducts short research topics that build knowledge about a topic
  - W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories
  - SL.3.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.
- **Mathematics-**
  - MP.2 Reason abstractly and quantitatively.
  - MP.5 Use appropriate tools strategically.
  - 3.MD.A.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

Computer Science and Design Thinking Standards:

- 8.1.5.DA.1: Collect, organize, and display data in order to highlight relationships or support a claim.
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- 8.1.5.DA.5: Propose cause and effect relationships, predict outcomes, or communicate ideas using data.

Career Readiness, Life Literacies, and Key Skills Standards:

- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.IML.6: Use appropriate sources of information from diverse sources, contexts, disciplines, and cultures to answer questions (e.g., RI.5.7, 6.1.5.HistoryCC.7, 7.1.NM.IPRET.5).

- 9.4.5.IML.7: Evaluate the degree to which information meets a need including social emotional learning, academic, and social (e.g., 2.2.5. PF.5)

UNIT 2:

Standards/Learning Targets

3-LS1-1. Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death. [Clarification Statement: Changes organisms go through during their life form a pattern.] [Assessment Boundary: Assessment of plant life cycles is limited to those of flowering plants. Assessment does not include details of human reproduction.]

Performance Expectations

Science and Engineering Practices	Disciplinary Core Ideas
Developing and Using Models Modeling in 3–5 builds on K–2 experiences and progresses to building and revising simple models and using models to represent events and design solutions. ● Develop models to describe phenomena. (3-LS1-1) **Scientific Knowledge is Based on Empirical Evidence** ● Science findings are based on recognizing patterns. (3-LS1-1)	**LS1.B: 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. (3-LS1-1)

Crosscutting Concepts	Learning Objectives
Patterns ● Patterns of change can be used to make predictions. (3-LS1-1)	Students will understand that … ● Reproduction is essential to every kind of organism. ● Organisms have unique and diverse life cycles. ● 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.

Evidence of Learning

Formative Assessments

- Multiple Choice Tests
- Weekly Tests
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- Class Discussion
- Graphic Organizers
- Reading Responses
- Learning Response Log
- Exit Slips
- Kinesthetic Assessments
- Running Records
- Constructive Quizzes
- Rubric
- Cooperative Learning
- Teacher Conferences
- Teacher Observation
- Journals/Writer's Notebook
- Portfolio
- Individual Whiteboards
- Peer/Self Assessments
- Whiteboard Assessments
- Think-Pair-Share
- Literature Circles

Summative Assessments

- Writer's Workshop/Conferencing
- Pretest, Test and Daily Work
- Final Drafts
- Showcase Portfolio
- Reading Assessment/Running Records
- Oral Presentation
- Reflective journal

Benchmark Assessments

- AIMSWeb Testing (Fall, Winter, Spring)
- End of Unit Test or Chapter Test

Alternative Assessments

- Collaborative testing.
- Student portfolios
- Performance Tests
- Conferencing

Performance Tasks/Use of Technology

<u>Performance Tasks</u>

- Classwork
- Projects

<u>Use of Technology</u>

- Laptops or iPads
- Smartboard
- STEAM Lab

Modifications (Special Education, Gifted and Talented, ELLs)

IEP modifications:

- Leveled Guided Reading Books
- Paired partner reading
- Literacy Projects
- Student choice for publication
- Differentiated Instruction/Layered Curriculum/Tiered Lessons
- Books on tape

- Preferential seating
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504 Modification Plan:

- After school tutoring
- Constant parental contact
- Extra time for completion of work
- Possible partial credit
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- Modified writing assignment lengths
- Timelines and checkpoints
- Small group instruction as needed
- Anchor activities
- Instructional technology as needed/required
- Appropriate scaffolding provided as necessary
- Anchor charts
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Gifted and Talented:

- ask open-ended questions
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- do not always be explicit, allow for discovery
- use centers and group students according to ability or interest
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- use leveled texts and offer an advanced reader reading list
- ask "why" and "what if" questions
- use varied modes of pre-assessment and assessment

English Language Learners:

- Visuals
- Gesturing
- Miming and roleplay
- Use of realia and manipulatives

- Simplified lange/teacher talk/thinking aloud
- Personal word walls
- Introducing key vocabulary before lesson
- Small group instruction
- Providing a student buddy

Bay Head Elementary School Curriculum
Unit Overview

Content Area: Science Unit 3 **Grade Level:** Third Grade

Domain (Unit Title): 3-LS2 Ecosystems: Interactions, Energy, and Dynamics

Unit Summary: In this unit of study, students develop an understanding of the types of organisms that lived long ago and also about the nature of their environments. Students develop an understanding of the idea that when the environment changes, some organisms survive and reproduce, some move to new locations, some move into the transformed environment, and some die. The crosscutting concepts of *systems and system models*; *scale, proportion, and quantity*; and *the influence of engineering, technology, and science on society and the natural world* are called out as organizing concepts for these disciplinary core ideas. Students are expected to demonstrate grade-appropriate proficiency in *asking questions and defining problems*, *analyzing and interpreting data*, and *engaging in argument from evidence*. Students are also expected to use these practices to demonstrate an understanding of the core ideas

Primary Interdisciplinary Connections:

- **ELA/Literacy-**
  - RI.3.1 Ask and answer questions, and make relevant connections to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
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- **Mathematics-**

- MP.2 Reason abstractly and quantitatively.
- MP.5 Use appropriate tools strategically.
- 3.MD.A.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

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- 8.1.5.DA.1: Collect, organize, and display data in order to highlight relationships or support a claim.
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- 8.1.5.DA.5: Propose cause and effect relationships, predict outcomes, or communicate ideas using data.

Career Readiness, Life Literacies, and Key Skills Standards:

- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.IML.6: Use appropriate sources of information from diverse sources, contexts, disciplines, and cultures to answer questions (e.g., RI.5.7, 6.1.5.HistoryCC.7, 7.1.NM. IPRET.5).
- 9.4.5.IML.7: Evaluate the degree to which information meets a need including social emotional learning, academic, and social (e.g., 2.2.5. PF.5)

UNIT 3:

Standards/Learning Targets

3-LS2-1. Construct an argument that some animals form groups that help members survive.

Performance Expectations

Science and Engineering Practices	Disciplinary Core Ideas
Engaging in Argument from Evidence Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing	**LS2.D: Social Interactions and Group Behavior** ● Being part of a group helps animals obtain food, defend themselves, and cope with changes. Groups may

relevant evidence about the natural and designed world(s). ● Construct an argument with evidence, data, and/or a model. (3-LS2-1)	serve different functions and vary dramatically in size (Note: Moved from K–2). (3-LS2-1)

Crosscutting Concepts	**Learning Objectives**
Cause and Effect ● Cause and effect relationships are routinely identified and used to explain change. (3-LS2- 1)	Students will understand that… ● When the environment changes, some organisms survive and reproduce, some move to new locations, some move into the transformed environment, and some die. ● Being part of a group helps animals obtain food, defend themselves, and cope with changes. ● Some living organisms resemble organisms that once lived on Earth. Fossils provide evidence about the types of organisms and environments that existed long ago. ● Differences in characteristics between individuals of the same species provide advantages in surviving and reproducing. ● Particular organisms can only survive in particular environments. ● Populations of organisms live in a variety of habitats. Change in those habitats affects the organisms living there.

Evidence of Learning

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Performance Tasks

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- Providing a student buddy

Bay Head Elementary School Curriculum
Unit Overview

Content Area: Science Unit 4	**Grade Level:** Third Grade
Domain (Unit Title): 3-LS3 Heredity: Inheritance and Variation of Traits	
Unit Summary: In this unit of study, students develop an understanding of the similarities	

and differences in organisms' life cycles. In addition, students use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing. The crosscutting concepts of *patterns* and *cause and effect* are called out as organizing concepts for these disciplinary core ideas. Students demonstrate grade-appropriate proficiency in *developing and using models and constructing explanations and designing solutions*. Students are also expected to use these practices to demonstrate an understanding of the core ideas.

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UNIT 4:

Standards/Learning Targets

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. [Clarification Statement: Patterns are the similarities and differences in traits shared between offspring and their parents, or among siblings. Emphasis is on organisms other than humans.] [Assessment Boundary: Assessment does not include genetic mechanisms of inheritance and prediction of traits. Assessment is limited to non-human examples.]

3-LS3-2. Use evidence to support the explanation that traits can be influenced by the environment. [Clarification Statement: Examples of the environment affecting a trait could include normally tall plants grown with insufficient water are stunted; and, a pet dog that is given too much food and little exercise may become overweight.]

Performance Expectations

Science and Engineering Practices	Disciplinary Core Ideas
Analyzing and Interpreting Data Analyzing data in 3–5 builds on K–2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used. • Analyze and interpret data to make sense of phenomena using logical reasoning. (3-LS3-1)	**LS3.A: Inheritance of Traits** • Many characteristics of organisms are inherited from their parents. (3-LS3-1) • Other characteristics result from individuals' interactions with the environment, which can range from diet to learning. Many characteristics involve both inheritance and environment. (3- LS3-2)

Constructing Explanations and Designing Solutions Constructing explanations and designing solutions in 3–5 builds on K–2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems. ● Use evidence (e.g., observations, patterns) to support an explanation. (3-LS3-2)	**LS3.B: Variation of Traits** ● Different organisms vary in how they look and function because they have different inherited information. (3-LS3-1) ● The environment also affects the traits that an organism develops. (3-LS3-2)

Crosscutting Concepts	**Learning Objectives**
Patterns ● Similarities and differences in patterns can be used to sort and classify natural phenomena. (3-LS3-1) **Cause and Effect** ● Cause and effect relationships are routinely identified and used to explain change. (3-LS3-2)	Students will … ● Reproduction is essential to every kind of organism. ● Organisms have unique and diverse life cycles. ● 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.

Evidence of Learning

Formative Assessments

- Multiple Choice Tests
- Weekly Tests
- Writer's Workshop
- Class Discussion
- Graphic Organizers
- Reading Responses
- Learning Response Log
- Exit Slips
- Kinesthetic Assessments
- Running Records
- Constructive Quizzes
- Rubric
- Cooperative Learning
- Teacher Conferences
- Teacher Observation
- Journals/Writer's Notebook
- Portfolio
- Individual Whiteboards
- Peer/Self Assessments
- Whiteboard Assessments
- Think-Pair-Share
- Literature Circles

Summative Assessments

- Writer's Workshop/Conferencing
- Pretest, Test and Daily Work
- Final Drafts
- Showcase Portfolio
- Reading Assessment/Running Records
- Oral Presentation
- Reflective journal

Benchmark Assessments

- AIMSWeb Testing (Fall, Winter, Spring)
- End of Unit Test or Chapter Test

Alternative Assessments

- Collaborative testing.
- Student portfolios
- Performance Tests
- Conferencing

Performance Tasks/Use of Technology

Performance Tasks

- Classwork
- Projects

Use of Technology

- Laptops or iPads
- Smartboard
- STEAM Lab

Modifications (Special Education, Gifted and Talented, ELLs)

IEP modifications:

- Leveled Guided Reading Books
- Paired partner reading
- Literacy Projects
- Student choice for publication
- Differentiated Instruction/Layered Curriculum/Tiered Lessons
- Books on tape
- Preferential seating
- Scriber for students who can't write
- Computer Based Programs (i.e., Study Island, Learnia, KidBiz, Accelerated Reader, Core K-12)

504 Modification Plan:

- After school tutoring
- Constant parental contact
- Extra time for completion of work
- Possible partial credit
- Graphic organizers
- More/less time as appropriate
- Modified writing assignment lengths
- Timelines and checkpoints
- Small group instruction as needed
- Anchor activities
- Instructional technology as needed/required
- Appropriate scaffolding provided as necessary

- Anchor charts
- Guided notes
- Preferential seating

Gifted and Talented:

- ask open-ended questions
- encourage upper level intellectual behavior based on Bloom's Taxonomy (analyzing, evaluating, creating)

http://edorigami.wikispaces.com/Bloom's+Digital+Taxonomy

- do not always be explicit, allow for discovery
- use centers and group students according to ability or interest
- propose interest-based extension activities
- use leveled texts and offer an advanced reader reading list
- ask "why" and "what if" questions
- use varied modes of pre-assessment and assessment

English Language Learners:

- Visuals
- Gesturing
- Miming and roleplay
- Use of realia and manipulatives
- Simplified lange/teacher talk/thinking aloud
- Personal word walls
- Introducing key vocabulary before lesson
- Small group instruction
- Providing a student buddy

Bay Head Elementary School Curriculum
Unit Overview

Content Area: Science Unit 5	**Grade Level:** Third Grade
Domain (Unit Title): 3-LS4 Biological Evolution: Unity and Diversity	

Unit Summary: In this unit of study, students acquire an understanding that organisms have different inherited traits and that the environment can also affect the traits that an organism develops. The crosscutting concepts of *patterns* and *cause and effec*t are called out as organizing concepts for these disciplinary core ideas. Students are expected to demonstrate grade-appropriate proficiency *in analyzing and interpreting data, constructing explanations*, and *designing solutions*. Students are also expected to use these practices to demonstrate an understanding of the core ideas.

Primary Interdisciplinary Connections:

- **ELA/Literacy-**
  - RI.3.1 Ask and answer questions, and make relevant connections to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
  - RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text using language that pertains to time, sequence, and cause and effect.
  - RI.3.8 Describe the logical connection between particular sentences and paragraphs in a text (eg., comparison, cause/effect, first/second/third in a sequence).
  - W.3.7 Conducts short research topics that build knowledge about a topic
  - W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories
  - SL.3.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.
- **Mathematics-**
  - MP.2 Reason abstractly and quantitatively.
  - MP.5 Use appropriate tools strategically.
  - 3.MD.A.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

Computer Science and Design Thinking Standards:

- 8.1.5.DA.1: Collect, organize, and display data in order to highlight relationships or support a claim.
- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.
- 8.1.5.DA.5: Propose cause and effect relationships, predict outcomes, or communicate ideas using data.

Career Readiness, Life Literacies, and Key Skills Standards:

- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).

- 9.4.5.IML.6: Use appropriate sources of information from diverse sources, contexts, disciplines, and cultures to answer questions (e.g., RI.5.7, 6.1.5.HistoryCC.7, 7.1.NM. IPRET.5).
- 9.4.5.IML.7: Evaluate the degree to which information meets a need including social emotional learning, academic, and social (e.g., 2.2.5. PF.5)

UNIT 5:

Standards/Learning Targets

3-LS4-1. Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago. [Clarification Statement: Examples of data could include type, size, and distributions of fossil organisms. Examples of fossils and environments could include marine fossils found on dry land, tropical plant fossils found in Arctic areas, and fossils of extinct organisms.] [Assessment Boundary: Assessment does not include identification of specific fossils or present plants and animals. Assessment is limited to major fossil types and relative ages.]

3-LS4-2. Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing. [Clarification Statement: Examples of cause and effect relationships could be plants that have larger thorns than other plants may be less likely to be eaten by predators; and animals that have better camouflage coloration than other animals may be more likely to survive and therefore more likely to leave offspring.]

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. [Clarification Statement: Examples of evidence could include needs and characteristics of the organisms and habitats involved. The organisms and their habitat make up a system in which the parts depend on each other.]

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.* [Clarification Statement: Examples of environmental changes could include changes in land characteristics, water distribution, temperature, food, and other organisms.] [Assessment Boundary: Assessment is limited to a single environmental change. Assessment does not include the greenhouse effect or climate change.]

Performance Expectations

Science and Engineering Practices	**Disciplinary Core Ideas**

Analyzing and Interpreting Data
Analyzing data in 3–5 builds on K–2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used.

- Analyze and interpret data to make sense of phenomena using logical reasoning. (3-LS4-1)

Constructing Explanations and Designing Solutions
Constructing explanations and designing solutions in 3–5 builds on K–2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.

- Use evidence (e.g., observations, patterns) to construct an explanation. (3-LS4-2)

Engaging in Argument from Evidence
Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s).

- Construct an argument with evidence. (3-LS4-3)
- Make a claim about the merit of a solution to a problem by citing relevant evidence about how it meets the criteria and constraints of the problem. (3-LS4-4)

LS2.C: 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. (secondary to 3-LS4-4)

LS4.A: Evidence of Common Ancestry and Diversity

- Some kinds of plants and animals that once lived on Earth are no longer found anywhere. (Note: moved from K-2) (3-LS4-1)
- Fossils provide evidence about the types of organisms that lived long ago and also about the nature of their environments. (3-LS4-1)

LS4.B: Natural Selection

- Sometimes the differences in characteristics between individuals of the same species provide advantages in surviving, finding mates, and reproducing. (3-LS4-2)

LS4.C: Adaptation

- For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all. (3-LS4-3)
- **LS4.D: Biodiversity and Humans**
  Populations live in a variety of habitats, and change in those habitats affects the organisms living there. (3-LS4-4)

Crosscutting Concepts	**Learning Objectives**
Cause and Effect	Students will understand that…

• Cause and effect relationships are routinely identified and used to explain change. (3-LS4- 2),(3-LS4-3) **Scale, Proportion, and Quantity** • Observable phenomena exist from very short to very long time periods. (3-LS4-1) **Systems and System Models** • A system can be described in terms of its components and their interactions. (3-LS4-4) **Interdependence of Science, Engineering, and Technology** • Knowledge of relevant scientific concepts and research findings is important in engineering. (3-LS4-4) **Scientific Knowledge Assumes an Order and Consistency in Natural Systems** • Science assumes consistent patterns in natural systems. (3-LS4-1)	• Reproduction is essential to every kind of organism. • Organisms have unique and diverse life cycles. • 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.

Evidence of Learning

Formative Assessments

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- Weekly Tests
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- Class Discussion
- Graphic Organizers
- Reading Responses
- Learning Response Log
- Exit Slips
- Kinesthetic Assessments
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- Literature Circles

Summative Assessments

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- Final Drafts
- Showcase Portfolio
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- Oral Presentation
- Reflective journal

Benchmark Assessments

- AIMSWeb Testing (Fall, Winter, Spring)
- End of Unit Test or Chapter Test

Alternative Assessments

- Collaborative testing.
- Student portfolios
- Performance Tests
- Conferencing

Performance Tasks/Use of Technology

Performance Tasks

- Classwork
- Projects

Use of Technology

- Laptops or iPads
- Smartboard
- STEAM Lab

Modifications (Special Education, Gifted and Talented, ELLs)

IEP modifications:

- Leveled Guided Reading Books
- Paired partner reading
- Literacy Projects
- Student choice for publication
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- Visuals
- Gesturing
- Miming and roleplay
- Use of realia and manipulatives
- Simplified lange/teacher talk/thinking aloud
- Personal word walls
- Introducing key vocabulary before lesson
- Small group instruction
- Providing a student buddy

Bay Head Elementary School Curriculum
Unit Overview

Content Area: Science Unit 6 **Grade Level:** Third Grade

Domain (Unit Title): 3-ESS2 Earth’s Systems

Unit Summary: In this unit of study, students organize and use data to describe typical weather conditions expected during a particular season. By applying their understanding of weather-related hazards, students are able to make a claim about the merit of a design solution that reduces the impacts of such hazards. The crosscutting concepts of *patterns, cause and effect*, and the *influence of engineering, technology, and science on society and the natural world* are called out as organizing concepts for these disciplinary core ideas. Students demonstrate grade-appropriate proficiency in a*sking questions and defining problems, analyzing and interpreting data, engaging in argument from evidence*, and *obtaining, evaluating, and communicating information*. Students are also expected to use these practices to demonstrate an understanding of the core ideas.

Primary Interdisciplinary Connections:

- **ELA/Literacy-**
  - RI.3.1 Ask and answer questions, and make relevant connections to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
  - RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text using language that pertains to time, sequence, and cause and effect.

- RI.3.8 Describe the logical connection between particular sentences and paragraphs in a text (eg., comparison, cause/effect, first/second/third in a sequence).
- W.3.7 Conducts short research topics that build knowledge about a topic
- W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories
- SL.3.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.

- **Mathematics-**
  - MP.2 Reason abstractly and quantitatively.
  - MP.5 Use appropriate tools strategically.
  - 3.MD.A.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

Computer Science and Design Thinking Standards:

- 8.1.5.DA.1: Collect, organize, and display data in order to highlight relationships or support a claim.
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- 8.1.5.DA.5: Propose cause and effect relationships, predict outcomes, or communicate ideas using data.

Career Readiness, Life Literacies, and Key Skills Standards:

- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.IML.6: Use appropriate sources of information from diverse sources, contexts, disciplines, and cultures to answer questions (e.g., RI.5.7, 6.1.5.HistoryCC.7, 7.1.NM. IPRET.5).
- 9.4.5.IML.7: Evaluate the degree to which information meets a need including social emotional learning, academic, and social (e.g., 2.2.5. PF.5)

UNIT 6:
Standards/Learning Targets
3-ESS2-1. Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season. [Clarification Statement: Examples of data could include average temperature, precipitation, and wind direction.] [Assessment Boundary: Assessment of graphical displays is limited to pictographs and bar graphs. Assessment does not include climate change.]

3-ESS2-2. Obtain and combine information to describe climates in different regions of the world

Performance Expectations

Science and Engineering Practices

Analyzing and Interpreting Data
Analyzing data in 3–5 builds on K–2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used.

- Represent data in tables and various graphical displays (bar graphs and pictographs) to reveal patterns that indicate relationships. (3-ESS2-1)

Obtaining, Evaluating, and Communicating Information
Obtaining, evaluating, and communicating information in 3–5 builds on K–2 experiences and progresses to evaluating the merit and accuracy of ideas and methods.

- Obtain and combine information from books and other reliable media to explain phenomena. (3-ESS2-2)

Disciplinary Core Ideas

ESS2.D: 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. (3-ESS2-1)
- Climate describes a range of an area's typical weather conditions and the extent to which those conditions vary over years. (3-ESS2-2)

Crosscutting Concepts

Patterns

- Patterns of change can be used to make predictions. (3-ESS2-1),(3-ESS2-2)

Learning Objectives

Students will understand that …

- Climate describes patterns of typical weather conditions over different scales and variations.
- Data in tables and graphical displays to describe typical weather conditions.
- Weather patterns can be analyzed.

	• Solutions can be designed to reduce the impact of a weather-related hazard.

Evidence of Learning

Formative Assessments

- Multiple Choice Tests
- Weekly Tests
- Writer's Workshop
- Class Discussion
- Graphic Organizers
- Reading Responses
- Learning Response Log
- Exit Slips
- Kinesthetic Assessments
- Running Records
- Constructive Quizzes
- Rubric
- Cooperative Learning
- Teacher Conferences
- Teacher Observation
- Journals/Writer's Notebook
- Portfolio
- Individual Whiteboards
- Peer/Self Assessments
- Whiteboard Assessments
- Think-Pair-Share
- Literature Circles

Summative Assessments

- Writer's Workshop/Conferencing
- Pretest, Test and Daily Work
- Final Drafts
- Showcase Portfolio
- Reading Assessment/Running Records
- Oral Presentation
- Reflective journal

Benchmark Assessments

- AIMSWeb Testing (Fall, Winter, Spring)
- End of Unit Test or Chapter Test

Alternative Assessments

- Collaborative testing.
- Student portfolios
- Performance Tests
- Conferencing

Performance Tasks/Use of Technology

<u>Performance Tasks</u>

- Classwork
- Projects

<u>Use of Technology</u>

- Laptops or iPads
- Smartboard
- STEAM Lab

Modifications (Special Education, Gifted and Talented, ELLs)

IEP modifications:

- Leveled Guided Reading Books
- Paired partner reading
- Literacy Projects
- Student choice for publication
- Differentiated Instruction/Layered Curriculum/Tiered Lessons
- Books on tape

- Preferential seating
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504 Modification Plan:

- After school tutoring
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- Introducing key vocabulary before lesson
- Small group instruction
- Providing a student buddy

Bay Head Elementary School Curriculum
Unit Overview

Content Area: Science Unit 7 **Grade Level:** Third Grade

Domain (Unit Title): 3-ESS3 Earth and Human Activity

Unit Summary: In this unit of study, students develop an understanding of the types of organisms that lived long ago and also about the nature of their environments. Students develop an understanding of the idea that when the environment changes, some organisms survive and reproduce, some move to new locations, some move into the transformed environment, and some die. The crosscutting concepts of *systems and system models*; *scale, proportion, and quantity*; and *the influence of engineering, technology, and science on society and the natural world* are called out as organizing concepts for these disciplinary core ideas. Students are expected to demonstrate grade-appropriate proficiency in *asking questions and defining problems*, *analyzing and interpreting data*, and *engaging in argument from evidence*. Students are also expected to use these practices to demonstrate an understanding of the core ideas

Primary Interdisciplinary Connections:

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- MP.2 Reason abstractly and quantitatively.
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- 9.4.5.IML.7: Evaluate the degree to which information meets a need including social emotional learning, academic, and social (e.g., 2.2.5. PF.5)

UNIT 7:
Standards/Learning Targets
3-ESS3-1. Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.* [Clarification Statement: Examples of design solutions to weather-related hazards could include barriers to prevent flooding, wind resistant roofs, and lightning rods.]
Performance Expectations

Science and Engineering Practices	Disciplinary Core Ideas
Engaging in Argument from Evidence Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s). ● Make a claim about the merit of a solution to a problem by citing relevant evidence about how it meets the criteria and constraints of the problem. (3-ESS3-1)	**ESS3.B: Natural Hazards** ● A variety of natural hazards result from natural processes. Humans cannot eliminate natural hazards but can take steps to reduce their impacts. (3-ESS3-1) (Note: This Disciplinary Core Idea is also addressed by 4-ESS3-2.)

Crosscutting Concepts	Learning Objectives
Cause and Effect ● Cause and effect relationships are routinely identified, tested, and used to explain change. (3-ESS3-1) **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). (3-ESS3-1) **Science is a Human Endeavor** ● Science affects everyday life. (3-ESS3-1)	Students will understand that… ● Climate describes patterns of typical weather conditions over different scales and variations. ● Data in tables and graphical displays to describe typical weather conditions. ● Weather patterns can be analyzed. ● Solutions can be designed to reduce the impact of a weather-related hazard.

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- Use of realia and manipulatives
- Simplified lange/teacher talk/thinking aloud
- Personal word walls
- Introducing key vocabulary before lesson
- Small group instruction
- Providing a student buddy

Bay Head Elementary School Curriculum
Unit Overview

Content Area: Science Unit 8 **Grade Level:** Third Grade

Domain (Unit Title): 3-5 ETS1 Engineering Design

Primary Interdisciplinary Connections:

- **ELA/Literacy-**

- RI.3.1 Ask and answer questions, and make relevant connections to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text using language that pertains to time, sequence, and cause and effect.
- RI.3.8 Describe the logical connection between particular sentences and paragraphs in a text (eg., comparison, cause/effect, first/second/third in a sequence).
- W.3.7 Conducts short research topics that build knowledge about a topic
- W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories
- SL.3.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.

- **Mathematics-**
  - MP.2 Reason abstractly and quantitatively.
  - MP.5 Use appropriate tools strategically.
  - 3.MD.A.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

Computer Science and Design Thinking Standards:

- 8.1.5.DA.1: Collect, organize, and display data in order to highlight relationships or support a claim.
- 8.1.5.DA.3: Organize and present collected data visually to communicate insights gained from different views of the data.
- 8.1.5.DA.5: Propose cause and effect relationships, predict outcomes, or communicate ideas using data.

Career Readiness, Life Literacies, and Key Skills Standards:

- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.IML.6: Use appropriate sources of information from diverse sources, contexts, disciplines, and cultures to answer questions (e.g., RI.5.7, 6.1.5.HistoryCC.7, 7.1.NM. IPRET.5).
- 9.4.5.IML.7: Evaluate the degree to which information meets a need including social emotional learning, academic, and social (e.g., 2.2.5. PF.5)

UNIT 8:
Standards/Learning Targets
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.**
Performance Expectations

Science and Engineering Practices	**Disciplinary Core Ideas**
Asking Questions and Defining Problems Asking questions and defining problems in 3–5 builds on grades K–2 experiences and progresses to specifying qualitative relationships. ● 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) **Planning and Carrying Out Investigations** Planning and carrying out investigations to answer questions or test solutions to problems in 3–5 builds on K–2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions. ● 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	**ETS1.A: Defining and Delimiting Engineering Problems** ● Possible solutions to a problem are limited by the 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) **ETS1.B: 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. (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

considered. (3-5-ETS1-3) **Constructing Explanations and Designing Solutions** Constructing explanations and designing solutions in 3–5 builds on K–2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems. ● 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)	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) **ETS1.C: 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. (3-5-ETS1-3)

Crosscutting Concepts	**Learning Objectives**
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. (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)	Students will understand that… ● 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. ● The shape and stability of structures of natural and designed objects are related to their function(s)

Evidence of Learning

Formative Assessments

- Multiple Choice Tests
- Weekly Tests
- Writer's Workshop
- Class Discussion
- Graphic Organizers
- Reading Responses
- Learning Response Log
- Exit Slips
- Kinesthetic Assessments
- Running Records
- Constructive Quizzes
- Rubric
- Cooperative Learning
- Teacher Conferences
- Teacher Observation
- Journals/Writer's Notebook
- Portfolio
- Individual Whiteboards
- Peer/Self Assessments
- Whiteboard Assessments
- Think-Pair-Share
- Literature Circles

Summative Assessments

- Writer's Workshop/Conferencing
- Pretest, Test and Daily Work
- Final Drafts
- Showcase Portfolio
- Reading Assessment/Running Records
- Oral Presentation
- Reflective Journal

Benchmark Assessments

- AIMSWeb Testing (Fall, Winter, Spring)
- End of Unit Test or Chapter Test

Alternative Assessments

- Collaborative testing.
- Student portfolios
- Performance Tests
- Conferencing

Performance Tasks/Use of Technology

<u>Performance Tasks</u>

- Classwork
- Projects

<u>Use of Technology</u>

- Laptops or iPads
- Smartboard
- STEAM Lab

Modifications (Special Education, Gifted and Talented, ELLs)

IEP modifications:

- Leveled Guided Reading Books
- Paired partner reading
- Literacy Projects
- Student choice for publication
- Differentiated Instruction/Layered Curriculum/Tiered Lessons
- Books on tape
- Preferential seating
- Scriber for students who can't write
- Computer Based Programs (i.e., Study Island, Learnia, KidBiz, Accelerated Reader, Core K-12)

504 Modification Plan:

- After school tutoring
- Constant parental contact
- Extra time for completion of work

- Possible partial credit
- Graphic organizers
- More/less time as appropriate
- Modified writing assignment lengths
- Timelines and checkpoints
- Small group instruction as needed
- Anchor activities
- Instructional technology as needed/required
- Appropriate scaffolding provided as necessary
- Anchor charts
- Guided notes
- Preferential seating

Gifted and Talented:

- ask open-ended questions
- encourage upper level intellectual behavior based on Bloom's Taxonomy (analyzing, evaluating, creating)

http://edorigami.wikispaces.com/Bloom's+Digital+Taxonomy

- do not always be explicit, allow for discovery
- use centers and group students according to ability or interest
- propose interest-based extension activities
- use leveled texts and offer an advanced reader reading list
- ask "why" and "what if" questions
- use varied modes of pre-assessment and assessment

English Language Learners:

- Visuals
- Gesturing
- Miming and roleplay
- Use of realia and manipulatives
- Simplified lange/teacher talk/thinking aloud
- Personal word walls
- Introducing key vocabulary before lesson
- Small group instruction
- Providing a student buddy