COURSE OF STUDY GUIDE
CAPE MAY REGIONAL SCHOOL DISTRICT

TITLE OF COURSE: LIFE SCIENCE **DEPARTMENT: SCIENCE**

GRADE: 7 **DATE REVISED: JULY 2016**

Lori Schulte, Heather Shagren, Shelley Vogelei

I. COURSE ORGANIZATION

Length: ONE YEAR Credits:N/A

Periods per Week: Two-80 min Blocks, One-42 min class Weighted: N/A

Prerequisite: N/A

II. COURSE DESCRIPTION

7th Grade Life Science at RMT encompasses Life Science. This year long course is aligned with Next Generation Standards and prepares students to take the required state assessment in Science. The design of this course includes Skills of a Scientist, Careers, Measurement, Technology, NJ Flora and Fauna, Living Things and their Characteristics, Spontaneous Generation/Biogenesis, Microscopes, Cell Theory, Animal and Plant Cells, Cell Processes, Human Body, Genetics, Classification and Ecology.

III. COURSE MISSION

Life Science will provide RM Teitelman Scientists with the skills and content to make informed decisions regarding the natural world around them and careers directly related to this field.

IV. DEPARTMENT MISSION

The mission statement for RM Teitelman Science is to endow all learners with the power and potential of science in their lives. It is a lifelong journey where science plays an important role in their everyday connection with Biology.

VI. COURSE LEVEL ASSESSMENTS & BENCHMARKS

BENCHMARK 1: 7th Grade Scientists will analyze and demonstrate the skills necessary in science; qualitative and quantitative observations, graphing, hypothesizing, and analyzing biological facts vs. myths.

BENCHMARK 2: 7th Grade Scientists will use Metric scientific tools to accurately measure objects with appropriate units.

BENCHMARK 3: 7th Grade Scientists will identify the six characteristics that all living things possess.
BENCHMARK 4: 7th Grade Scientists will explain the seven levels of Classification and the unique features of kingdoms.

BENCHMARK 5: 7th Grade Scientists will classify the five classes of vertebrate animals.

BENCHMARK 6: 7th Grade Scientists will accurately use a Microscope to magnify objects.

BENCHMARK 7: 7th Grade Scientists will compare and contrast animal and plant cell organelles.

BENCHMARK 8: 7th Grade Scientists will analyze cell processes and energy.

BENCHMARK 9: 7th Grade Scientists will account for the differences in dominant and recessive traits

BENCHMARK 10: 7th Grade Scientists will accurately use Punnett Squares for Probability.

BENCHMARK 11: 7th Grade Scientists will identify the structures of DNA.

BENCHMARK 12: 7th Grade Scientists will describe characteristics of the 5 Kingdoms of Life

BENCHMARK 13: 7th Grade Scientists will classify the levels of Organization in living things.

BENCHMARK 14: 7th Grade Scientists will organize Human Body Systems structures and functions.

BENCHMARK 15: 7th Grade Scientists will categorize food chains and webs in ecosystems.

BENCHMARK 16: 7th Grade Scientists will analyze features of the Earth's 6 Biomes

VII. ASSESSMENT TASKS

Written	*Oral*	*Visual*
ChromeBook Web Sites	Exit Questions	ChromeBook Web Sites
Lab Conclusion Questions	Lab Procedures	Bill Nye/Eyewitness Videos
Tests & Quizzes	Project Presentations	Smart Board/Mimeo Board
Benchmarks	Lab Experiments	Science World Magazine
Science World Magazine		Magazine/Newspaper Articles
Science Poetry		Science Field Trips
Magazine/Newspaper Articles Analysis		Magazine/Newspaper Articles Analysis
Lab Experiments		Lab Experiments

VIII. CONTENT/SUGGESTED INSTRUCTIONAL TIME

Content Pacing Guide & Standards

Unit Title: Introduction to Life Science		
Content: ***What is Life Science?*** Identify skills scientists use to learn about the world. Explain what Scientific Inquiry involves. Describe how to develop a hypothesis. Examine how to make observations and inferences. Practice reading and using Scientific tools properly. Practice safe lab procedures. Measure accurately using science tools. Explain how Technology is used by a scientist. ***Labs:*** *Lab Safety Contract, Safety Map, Safety Rules, Save Fred Inquiry Lab, Observation Labs, Penny Lab, M&M Graphing Lab, Obstertainers Hypothesis Lab, Metric Measurement Labs, Monarch Rearing Lab, Bird, Tree, and Bat Lab Experiences, Chromebook Introduction and Excel Graphing, Tool Time Labs, Skills of A Scientist-Next Generation Manual, Qualitative and Quantitative Observations* **Common Core State Standards:** CC6-8WH/SS/S/TS7 - Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. CCSS.ELA-Literacy.WHST.6-8.9 - Draw evidence from informational texts to	**21st Century** 9.1.12.A.1 CRITICAL THINKING 9.3.4 A.1 GROUP WORK 9.1.4.C.1 **NGSS** MS-LS1 From Molecules to Organisms: Structure and Processes MS-LS2 Ecosystems: Interactions, Energy, and Dynamics MS-LS3 Heredity: Inheritance and Variation of Traits MS-LS4 Biological Evolution: Unity and	Time Frame 6 Weeks/Year Long application

support analysis reflection, and research. CC.5.W.7 Research to Build and Present Knowledge: Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic. CC.5.R.I.7 Integration of Knowledge and Ideas: Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.	Diversity ETSI: Engineering Design ETS1.B: Developing Possible Solutions	

Physical Science	Life Science	Earth & Space Science	Engineering, Technology, & The Application of Science
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CROSSCUTTING CONCEPTS		
Patterns Observed patterns of forms and events guide organization and classification, and they prompt questions about relationships and the factors that influence them. **Cause and Effect: Mechanism and Explanation** Events have causes, sometimes simple, sometimes multifaceted. A major activity of science is investigating and explaining causal relationships and the mechanisms by which they are mediated. Such mechanisms can then be tested across given contexts and used to predict and explain events in new contexts.	**Scale, Proportion, and Quantity** In considering phenomena, it is critical to recognize what is relevant at different measures of size, time and energy and to recognize how changes in scale, proportion, or quantity affect a system's structure or performance. **Systems and System Models** Defining the system under study – specifying its boundaries and making explicit a model of that system – provides tools for understanding and testing ideas that are applicable throughout science and engineering.	☐ **Energy and Matter: Flows, Cycles, and Conservation** Tracking fluxes of energy and matter into, out of, and within systems helps one understand the systems' possibilities and limitations. **Structure and Function** The way in which an object or living thing is shaped and its substructure determine many of its properties and functions. **Stability and Change** For natural and built systems alike, conditions of stability and determinants of rates of change or evolution of a system are critical elements of study.

SCIENTIFIC AND ENGINEERING PRACTICES

Asking Questions and Defining Problems

A practice of science is to ask and refine questions that lead to descriptions and explanations of how the natural and designed world works and which can be empirically tested.
Engineering questions clarify problems to determine criteria for successful solutions and identify constraints to solve problems about the designed world.
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Planning and Carrying Out Investigations

Scientists and engineers plan and carry out investigations in the field or laboratory, working collaboratively as well as individually. Their investigations are systematic and require clarifying what counts as data and identifying variables or parameters.
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Analyzing and Interpreting Data

Scientific investigations produce data that must be analyzed in order to derive meaning. Because data patterns and trends are not always obvious, scientists use a range of tools-including tabulation, graphical interpretation, visualization, and statistical analysis-to identify the significant features and patterns in the data. Scientists identify sources of error in the investigations and calculate the degree of certainty in the results. Modern technology makes the collection of large data sets much easier, providing secondary sources for analysis.
Engineering investigations include analysis of data collected in the tests of designs. This allows comparison of different solutions and determines how well each meets specific design criteria-that is, which design best solves the problem within given constraints. Like scientists, engineers require a range of tools to identify patterns within data and interpret the results. Advances in science make analysis of proposed solutions more efficient and effective.

Developing and Using Models

A practice of both science and engineering is to use and construct models as helpful tools for representing ideas and explanations. These tools include diagrams, drawings, physical replicas, mathematical representations, analogies, and computer simulations.
Modeling tools are used to develop questions, predictions and explanations; analyze and identify flaws in systems; and communicate ideas. Models are used to build and revise scientific explanations and proposed engineered systems. Measurements and observations are used to revise models and designs.

Constructing Explanations and Designing Solutions

The products of science are explanations and the products of engineering are solutions.

The goal of science is the construction of the theories that provide explanatory accounts of the world. A theory becomes accepted when it has multiple lines of empirical evidence and greater explanatory power of phenomena than previous theories.
The goal of engineering design is to find a systematic solution to problems that is based on scientific knowledge and models of the material world. Each proposed solution results from a process of balancing competing criteria of desired functions, technical feasibility, cost, safety, aesthetics, and compliance with legal requirements. The optimal choice depends on how well the proposed solutions meet criteria and constraints.

Engaging in Argument from Evidence

Argumentation is the process by which explanations and solutions are reached.
In science and engineering, reasoning and argument based on evidence are essential to identifying the best explanation for a natural phenomenon or the best solution to a design problem.
Scientists and engineers use argumentation to listen to, compare, and evaluate competing ideas and methods based on merits.
Scientists and engineers engage in argumentation when investigating a phenomenon, testing a design solution, resolving questions about measurements, building data models, and using evidence to identify strengths and weaknesses of claims.

Using Mathematics and Computational Thinking

In both science and engineering, mathematics and computation are fundamental tools for representing physical variables and their relationships. They are used for a range of tasks such as constructing simulations; statistically analyzing data; and recognizing, expressing, and applying quantitative relationships.
Mathematical and computational approaches enable scientists and engineers to predict the behavior of systems and test the validity of such predictions. Statistical methods are frequently used to identify significant patterns and establish correlational relationships.

Obtaining, Evaluating, and Communicating Information

Scientists and engineers must be able to communicate clearly and persuasively the ideas and methods they generate. Critiquing and communicating ideas individually and in groups is a critical professional activity.
Communicating information and ideas can be done in multiple ways: using tables, diagrams, graphs, models and equations as well as orally, in writing, and through extended discussions. Scientists and engineers employ multiple sources to acquire information that is used to evaluate the merit and validity of claims, methods, and design

Unit Title: Characteristics of Life		
Content: ***What is Life? Characteristics of Living Things*** Inventory the 6 Characteristic Traits of Life (RADRON) Respond, Adapt, Develop/Grow, Reproduce, Organization, and Needing Energy. Explain where Living Things come from and what they need to survive. ***Labs:*** *"Born to Be Alive" Living vs. Nonliving Intro PPT, NJ Species Exploration, Inquiry and Conservation: Birds, Butterflies, Bees and Bats, Hide and Go Seek Adaptation, Dear Dorothy Research Project, NJ Tree Identification* **Common Core State Standards:** CC6-8WH/SS/S/TS7 - Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	**21st Century** 9.1.12.A.1 CRITICAL THINKING 9.3.4 A.1 GROUP WORK 9.1.4.C.1 **NGSS** LSI: From Molecules to Organisms – Structures and Processes MS-LS3 Heredity: Inheritance and Variation of Traits MS-LS4 Biological Evolution: Unity and Diversity	Time Frame 3 Weeks/ Year Long Application

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<table>
<tr><td colspan="3">Unit Title: Classifying Life</td></tr>
<tr>
<td>Content: Classifying Organisms

Clarify why biologists classify organisms.
Relate the levels of classification to the relationships between organisms.
List characteristics used to classify organisms into groups including domains and kingdoms.
Labs:
Gismo Dichotomous Key Lab, Loose at The Zoo, Kingdom Foldable Book, Bird, Bat, Bee, Butterfly Classification, Lab Exploration of Protists, Moneran-Handwashing Lab, Fungi, Plants and Animals

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Unit Title: Basic Units of Life		
Content: ***Discovering Cells*** Enlighten what cells are. Explain how the invention of the microscope contributed to scientists' understanding of living things. State the cell theory and contributing scientists. Describe how microscopes produce magnified images. Analyze Cell organelles and their structure and function. ***Labs:*** *Microscope Mastery Labs: Letter D Lab, Colored Thread Lab, Prepared vs Wet Mount Slides, Elodea Plant Cell Lab, Cheek Cell Lab, Back to the Future History of Spontaneous Generation Biogenesis Theory, Bacteria and Virus Slide Investigation, Cell-ebration Project* **Common Core State Standards:**	**21st Century** 9.1.12.A.1 Critical Thinking 9.3.4 A.1 Group Work 9.1.4.C.1 NGSS: LSI: From Molecules to Organisms – Structures and Processes MS-LS3 Heredity: Inheritance and Variation of Traits	Time Frame 6 Weeks

CC6-8WH/SS/S/TS7 - Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. CCSS.ELA-Literacy.WHST.6-8.9 - Draw evidence from informational texts to support analysis reflection, and research. CC.5.W.7 Research to Build and Present Knowledge: Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic. CC.5.R.I.7 Integration of Knowledge and Ideas: Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.	MS-LS4 Biological Evolution: Unity and Diversity SS3: Earth and Human Activity	

Physical Science	Life Science	Earth & Space Science	Engineering, Technology, & The Application of Science
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	Diversity _X_ LS4.A: Evidence of Common Ancestry and Diversity _X_ LS4.B: Natural Selection _X_ LS4.C: Adaptation _X_ LS4.D: Biodiversity and Humans		

CROSSCUTTING CONCEPTS		
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Planning and Carrying Out Investigations

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☐ **Constructing Explanations and Designing Solutions**

The products of science are explanations and the products of engineering are solutions.
The goal of science is the construction of the theories that provide explanatory accounts of the world. A theory becomes accepted when it has multiple lines of empirical evidence and greater explanatory power of phenomena than previous theories. The goal of engineering design is to find a systematic solution to problems that is based on scientific knowledge and models of the material world. Each proposed solution results from a process of balancing competing criteria of desired functions, technical feasibility, cost, safety, aesthetics, and compliance with legal requirements. The optimal choice depends on how well the proposed solutions meet criteria and constraints.

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Unit Title: Life Processes		
Content: ***Cell Processes and Energy*** Explain how water is important to the function of cells. Identify the four main kinds of organic compounds in living things. Recognize the 5 Cell Processes- Metabolism, Respiration, Osmosis, Diffusion, Reproduction and Need Energy. Photosynthesis, Mitosis, Respiration explained. ***Labs:*** *Osmosis-Diffusion Carrot/Celery Labs, Mitosis Onion Root Lab, Nutrition and Healthy Choice Unit* **Common Core State Standards:** CC6-8WH/SS/S/TS7 - Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. CCSS.ELA-Literacy.WHST.6-8.9 - Draw evidence from informational texts to support analysis reflection, and research. CC.5.W.7 Research to Build and Present Knowledge: Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic. CC.5.R.I.7 Integration of Knowledge and Ideas: Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.	**21st Century** 9.1.12.A.1 CRITICAL THINKING 9.3.4 A.1 GROUP WORK 9.1.4.C.1 NGSS: LSI: From Molecules to Organisms – Structures and Processes MS-LS3 Heredity: Inheritance and Variation of Traits MS-LS4 Biological Evolution: Unity and Diversity	Time Frame 4 Weeks

Physical Science	Life Science	Earth & Space Science	Engineering, Technology, & The Application of Science

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<table>
<tr><td colspan="3">Unit Title: The Study of Heredity</td></tr>
<tr>
<td>Content: Genetics
Describe the results of Mendel’s experiments.
Identify what controls the inheritance of traits in organisms.
Define Probability and utilize Punnett Squares. Explain what is meant by genotype and phenotype. Describe the role of chromosomes. Explain what forms the genetic code. Describe Proteins and mutations and how they affect an organism. Identify some patterns of inheritance in humans. Describe the functions of sex chromosomes. Identify major causes of genetic disorders and how they are traced, diagnosed and treated.
Portray the advances in Genetics via the goal of the Human Genome Project.

<u>Labs:</u>
Punnett Square Lab, DNA Building Lab, Coin Flip Lab, Build a Human Face Lab, Monster’s Inc. Lab, Dragon On Lab, Human Genetic World Wide Web Lab

<u>Common Core State Standards:</u>
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9.1.12.A.1
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</table>

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Unit Title: Viruses, Bacteria, Protists, Animal, and Fungi		
Content: ***Diversity of Living Things*** Proved an overview of the 5 Kingdoms of Life. List characteristics of viruses and state reasons why they are considered nonliving. Describe structure of bacteria cells. Compare autotrophs and heterotrophs and how	**21st Century** 9.1.12.A.1 CRITICAL THINKING 9.3.4 A.1	Time Frame 4 Weeks

energy is released. Describe conditions under which bacteria thrive and reproduce. Explain the positive role of bacteria. Describe the characteristics of protists and examples of each. Name the characteristics that all fungi share. Explain how they reproduce and their role in nature. ***Labs:*** *Dichotomous Key Lab, Live Protist and Pond Water Lab, Fungus Lab, Virus/Bacteria Websites, Handwashing Workshop, Human Body vs. other Kingdoms(Circulatory, Digestive, Nervous)* **Common Core State Standards:** CC6-8WH/SS/S/TS7 - Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. CCSS.ELA-Literacy.WHST.6-8.9 - Draw evidence from informational texts to support analysis reflection, and research. CC.5.W.7 Research to Build and Present Knowledge: Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic. CC.5.R.I.7 Integration of Knowledge and Ideas: Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.	GROUP WORK 9.1.4.C.1 NGSS: LSI: From Molecules to Organisms – Structures and Processes MS-LS3 Heredity: Inheritance and Variation of Traits MS-LS4 Biological Evolution: Unity and Diversity	

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_X_ LS2.A: Interdependent Relationships in Ecosystems
_X_ LS2.B: Cycles of Matter and Energy Transfer in Ecosystems
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Observed patterns of forms and events guide organization and classification, and they prompt questions about relationships and the factors that influence them.

Cause and Effect: Mechanism and Explanation
Events have causes, sometimes simple, sometimes multifaceted. A major activity of science is investigating and explaining causal relationships and the mechanisms by which they are mediated. Such mechanisms can then be tested across given contexts and used to predict and explain events in new contexts.

Scale, Proportion, and Quantity
In considering phenomena, it is critical to recognize what is relevant at different measures of size, time and energy and to recognize how changes in scale, proportion, or quantity affect a system's structure or performance.

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Tracking fluxes of energy and matter into, out of, and within systems helps one understand the systems' possibilities and limitations.

Structure and Function
The way in which an object or living thing is shaped and its substructure determine many of its properties and functions.

Stability and Change
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Using Mathematics and Computational Thinking

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<table>
<tr><td colspan="3">Unit Title: Human Body and Health</td></tr>
<tr>
<td>Content: Systems and Organization of the Human Body

Identify the levels of organization in the body. Define homeostasis, Identify the structure and function of the skeletal, respiratory, digestive, muscular, skin, nervous, endocrine, and circulatory systems.
Labs:
Multiple Intelligence and Brain Workshop, Valentine's Day Heart Workshop, Blood Transfusion Lab, Skeleton Lab, Nervous System Lab, SuperSize Me Nutrition Unit & Digestive System, New Year Health and Muscular System, Sunscreen and Skin Workshop,

<u>Common Core State Standards:</u>

CC6-8WH/SS/S/TS7 - Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.

CCSS.ELA-Literacy.WHST.6-8.9 - Draw evidence from informational texts to support analysis reflection, and research.

CC.5.W.7 Research to Build and Present Knowledge: Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.

CC.5.R.I.7 Integration of Knowledge and Ideas: Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.</td>
<td><u>21st Century</u>
9.1.12.A.1
CRITICAL THINKING
9.3.4 A.1
GROUP WORK
9.1.4.C.1

Standards
5.1.8 A-D
5.3.8 A1-A2
5.3.8 B1-B2</td>
<td>Time Frame
4 Weeks</td>
</tr>
</table>

Physical Science	Life Science	Earth & Space Science	Engineering, Technology, & The Application of Science
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Unit Title: Ecology

Content: *Populations, Communities, Ecosystems, Biomes, and Living Resources* Identify the biotic and abiotic factors in an environment. Describe the levels of organization within an ecosystem. Describe and analyze populations and limiting factors. Explain how adaptations are related to survival. Describe interactions among ecosystems. Identify symbiotic relationships. Describe the differences between primary and secondary succession. Describe biogeography, name the six major biomes found on Earth. Explain energy roles in an ecosystem. Describe how energy moves and is available through an ecosystem. Explain why and how populations hibernate and migrate. ***Labs:*** *Endangered Species Project, Population Lab, A Day In Cape May (field trip/lab), New Jersey Flora and Fauna: Trees, Birds, Bats, Butterflies* **Common Core State Standards:** CC6-8WH/SS/S/TS7 - Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. CCSS.ELA-Literacy.WHST.6-8.9 - Draw evidence from informational texts to support analysis reflection, and research. CC.5.W.7 Research to Build and Present Knowledge: Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic. CC.5.R.I.7 Integration of Knowledge and Ideas: Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.	**21st Century** 9.1.12.A.1 CRITICAL THINKING 9.3.4 A.1 GROUP WORK 9.1.4.C.1 Standards 5.3.8 C1, E1-E2 **NGSS** MS-LS1: From Molecules to Organisms- Structures and Processes MS-LS2: Ecosystems: Interactions, Energy and Dynamics MS-LS4: Biological Evolution: Unity and Diversity	Time Frame 4 Weeks

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IX. MODIFICATIONS: INCLUSION TECHNIQUES/ENRICHMENTS

1.) Provide questioning that is authentic; relate to student interests, social/family background and knowledge related to their community.

2.) Provide students with visual representation related to the scientific topic presented. (e.g. multisensory techniques-auditory/visual aide : Pictures, illustrations, graphs, charts, data tables, multimedia)

3.) Provide opportunities to incorporate and connect students with people of similar backgrounds as related to the topics presented in class. (e.g. conversations via digital tool such as SKYPE, experts from the community helping with a project, journal articles and biographies)

4.) Provide multiple grouping opportunities to share their ideas and in order to encourage work among various backgrounds and cultures (e.g. multiple representation and multimodal experiences)

5.) Engage student with a variety of Science and Engineering practices in order to provide students with multiple entry points and multiple ways to demonstrate their understandings.

6.) Use project-based science learning to connect science with observable phenomena.

7.) Structure learning around explaining or solving a social or community-based issue.

8.) Provide ELL students with multiple literacy strategies

9.) Collaborate with after –school programs and clubs to extend learning opportunities.

10.) Provide authentic learning experiences that are unique to local informal education centers.

11.) Restructure lesson using UDL principles (http://cast.org/our-work/about-udl.html#.VXmoXcfD_UA)

X. INTERDISCIPLINARY CONNECTIONS/MULTICULTURAL MATERIALS

Videos:
Bill Nye "Measuring In Science"
Bill Nye "Cells"
Bill Nye "Genetics"
Eyewitness Video "Moths and Butterflies"
Eyewitness Video "Birds"
Bat Conservation International "Secret Life of Bats"
Safari Montage Segments: Human Body, Mitosis, Photosynthesis, Respiration

Art:
Locker/Butterfly Get to Know You-First Day Activities
Endangered Species Shirts
Bird,Bat Butterfly Projects
Edible/ 3D Cell Models

Music:
Classical Music while working independently
Lab Safety Rap
Cell Song

Other:
Seasonal Poetry

XI. MATERIALS/TECHNOLOGY

Prentice Hall Life Science 2007

Mimio/Smartboard

Mimio Voters

Laptops

Document Camera

Compound Microscopes

Dissecting Microscopes

Triple Beam Balances

Graduated Cylinders

Test Tubes

Metric Rulers

Yearly Orders from the following vendors:

Science Kit and Boreal Lab

Educational Innovations