Seymour Public Schools Curriculum

Grade: 6 Subject: Science

The purpose of science in Grade 6 is for students to be able to connect how biotic and abiotic factors impact living things.

Unit 1- Energy Transfer: Penguin Habitat

In this unit, students are introduced to the problem of penguin habitat loss, due to the melting of the ice caps. Students begin by creating an initial model of a habitat for penguins to live in when relocated to a warmer climate. As the unit progresses, students learn about what makes ice melt faster and slower, which helps them understand what occurs at a molecular level. Later in the unit, students design their own insulators, and in the final sequence, design and build a model of a temperature-controlled shelter for penguins, based upon their understanding of heat transfer.

Unit 2- Weather & Atmosphere: Destructive Weather

This unit examines weather and climate, Earth's large-scale system interactions, and the role of water in Earth's surface processes, weather, and climate. Students will learn how the Earth's geo-systems operate by modeling the flow of energy and cycling of matter with and among different systems. As a result of this unit, students will have a greater understanding of climate change and the affect that humans have on the Earth's systems.

Unit 3- Body Systems: Lyme Disease

In this unit, students are asked to depict how a host gets Lyme disease. Over the course of the unit students will begin to understand that all living things exhibit 7 of the same characteristics. The culminating project allows students to pull together content from each of the learning sequences to provide Connecticut park goers with information that describes the transmission of the disease from spirochete to a symptomatic host, as well as promote park designs that may prevent the transmission of the disease.

Unit4- Reproduction and Growth: Declining Bee Population

This unit is about reproduction and growth and focuses on how systems interact between plants and animals; how plants have specialized structures and animals have specific behaviors to help aid reproduction; includes how environmental and genetic factors can affect growth; and to provide evidence for the genetic variation that occurs with sexual reproduction.

Seymour Public Schools Curriculum

UNIT 1- The purpose of this unit is for students to explore the problem of penguin habitat loss due to the melting of the ice caps, to learn about the difference between temperature and heat, and to be able to explain the different ways that heat is transferred between objects.

Phenomenon: **Grade:** **Time Frame: (# of weeks, etc)**	**Penguin Habitat** **6** **8 Weeks**
NGSS Overarching Standards	• MS-PS3-3 Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer. • MS-PS3-4 Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample. • MS-PS3-5 Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object. • MS-ETS1-3 Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success. • MS-ETS1-4 Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.
Enduring Understanding	• Heat and temperature affect the structure of matter. • As temperature increases or decreases, energy increases or decreases. • There are different materials that can be used to affect energy transfer. • Heat moves in a variety of ways, including conduction, convection, and radiation.
Essential Questions	• How does heat/temperature affect matter? • How is temperature related to energy? • How can heat/cold be contained? • How does heat move?
CCSS Connections **Priority Standards**	ELA/Literacy - • RST.6-8.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. (MS-PS3-3) • WHST.6-8.7 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. (MS-PS3-3)

	• RST.6-8.1 Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions. (MS-PS3-5) • WHST.6-8.1 Write arguments focused on discipline content. (MS-PS3-5) • RST.6-8.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). (MS-ETS1-3) • RST.6-8.9 Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. (MS-ETS1-3) • SL.8.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. (MS-ETS1-4) Mathematics • MP.2 Reason abstractly and quantitatively. (MS-PS3-4) • 6.SP.B.5 Summarize numerical data sets in relation to their context. *(MS-PS3-4)* • 6.RP.A.1 Understand the concept of ratio and use ratio language to describe a ratio relationship between two quantities. *(MS-PS3-5)* • 7.RP.A.2 Recognize and represent proportional relationships between quantities. *(MS-PS3-5)* • 8.F.A.3 Interpret the equation y = mx + b as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. *(MS-PS3-5)* • 7.EE.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. *(MS-ETS1-3)* • 7.SP Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy. *(MS-ETS1-4)*
Performance Expectations **(Student**	Students will: • Understand how heat is transferred. • Design, build, and test temperature-controlled shelters for penguins.

Seymour Public Schools Curriculum

outcomes: what students will know/understand and be able to do)	• Generate questions related to designing penguin shelters that keep the heat out. • Investigate what makes ice melt faster or slower. • Develop and use models to explain how energy affects the structure of matter. • Understand how some materials lose heat faster than others. • Develop explanations about how energy is transferred out of hotter objects to colder ones. • Gather and analyze data about the variables that affect energy transfer. • Test materials and designs for keeping objects cold. • Design a penguin habitat. • Construct explanations about which types of materials allow for less heat transfer. • Understand how heat moves and how this affects penguin habitats. • Design and conduct investigations to gather information about conduction, convection, and radiation. • Understand energy.

Strategies (examples)	**Materials/Resources (examples)**	**Assessments (examples)**
• Constructing Explanations and Designing Solutions. (Apply scientific ideas or principles to design, construct, and test a design of an object, tool, process or system.) • Planning and Carrying Out Investigations • Engaging in Argument from Evidence (Construct, use, and present oral and written arguments supported by evidence and scientific reasoning to support or refute an explanation or a model for a phenomenon.) • Analyze and Interpret Data (Analyze and interpret data to determine similarities and differences in findings.) • Developing and Using Models (Develop a model to generate data to test ideas about designed systems.) • Lab experiments • Class discussions	Ice melting blocks Thermometers Infrared laser thermometers Heat lamps Ice cubes Water Plastic cups Hot plate Beakers Aluminum foil Cotton balls Felt Foam pieces Bubble wrap Mylar Video clips (embedded in CREC bundles) Articles (embedded in bundles) Worksheets and lab sheets (embedded in bundles) Digital manipulatives (embedded in bundles)	<u>Summative Assessments</u> • Create a model or representation of a temperature-controlled shelter/habitat for penguins. <u>Formative Assessments</u> • Initial plan of a shelter (on paper-design, materials, etc.) • Temperature/heat lab and report • Ice melting lab and report • Yeti Tumbler Challenge Activity (Insulators) • Heat transfer lab and report

Seymour Public Schools Curriculum

UNIT 2- The purpose of this unit is for students to understand the concepts of weather and climate and the interactions of Earth's systems, while also exploring the concept of climate change and the affect that humans have on the world around them.

Phenomenon: **Grade:** **Time Frame: (# of weeks, etc)**	**Destructive Weather** **6** **8 Weeks**
NGSS Overarching Standards	• MS-ESS2-4 Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity. • MS-ESS2-5 Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions. • MS-ESS2-6 Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates. • MS-ESS3-3 Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment. • MS-ESS3-5 Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century. • MS-ETS1-2 Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.
Enduring Understanding	• Weather and climate are influenced by a variety of interactions, including sunlight, the ocean, the atmosphere, ice, landforms, and living things. • Water continually cycles among land, ocean, and atmosphere through a variety of processes. • The ocean absorbs energy from the sun, releases it over time, and globally redistributes it through ocean currents. • Humans can have both positive and negative impacts on Earth's systems. • Humans need to understand the impacts of their behavior and climate science to limit negative impacts on Earth's systems.
Essential Questions	• What factors interact and influence weather? • What are the processes involved in the cycling of water through Earth's systems? • Why does oceanic circulation determine regional climates? • How do humans affect our Earth's systems? • How can we limit negative human impacts on the Earth's systems? •

Seymour Public Schools Curriculum

CCSS Connections **Priority Standards**	ELA/Literacy • RST.6-8.1 Cite specific textual evidence to support analysis of science and technical texts.(MS-ESS2-5) • RST.6-8.9 Compare and contrast the information gained from experiments, simulations, video, or multimedia • sources with that gained from reading a text on the same topic. (MS-ESS2-5) • SL.8.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. *(MS-ESS2-6)* • WHST.6-8.7 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. (MS-ESS3-3) • WHST.6-8.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. (*MS-ESS3-3)* • WHST.6-8.9 Draw evidence from informational texts to support analysis, reflection, and research. *(MS-ETS1-2)* Mathematics • MP.2 Reason abstractly and quantitatively. (MS-ESS2-5) • 6.NS.C.5 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation. (MS-ESS2-5) • 6.EE.B.6 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set. *(MS-ESS3-5)* • 7.EE.B.4 Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.(MS-ESS3-5)
Performance Expectations	Students will: • Understand the factors that influence weather. • Understand what causes changes in weather conditions.

Seymour Public Schools Curriculum

(Student outcomes: what students will know/understand and be able to do)	• Develop a model to describe the cycling of water through Earth's systems. • Identify different forms of extreme weather in different regions of the world. • Understand how geography and landforms impact weather. • Analyze and interpret data to determine relationships between geography and weather/climate. • Understand how air masses can change the weather. • Utilize literacy strategies to interact with science texts. • Develop a model to describe the flow of energy and cycling of matter in Earth's atmosphere and oceans. • Understand the Coriolis Effect, and the effect of Earth's rotation on ocean circulation. • Argue from evidence about the stability of Earth's environment. • Apply scientific principles to design a method for monitoring and minimizing human impact on the environment. • Describe how human activities have affected the biosphere.

Strategies (examples)	**Materials/Resources (examples)**	**Assessments (examples)**
• Developing and Using Models • Planning and Carrying Out Investigations (Collect data to produce data to serve as the basis for evidence to answer scientific questions or test design solutions under a range of conditions.) • Apply scientific principles to design an object, tool, process or system • Ask questions to identify and clarify evidence of an argument. (Constructing a convincing argument that supports or refutes claims for either explanations or solutions about the natural and designed world.) • Lab experiments • Class discussions	Storage bins/boxes Glass beakers Ice Modeling clay Lamps/light sources Balloons Empty 2-liter soda bottles Clean soda cans Glass jars Food coloring Styrofoam cups Aluminum pie pans Plastic straws Plastic wrap Thermometers Soil Video clips (embedded in CREC bundles) Articles (embedded in bundles) Worksheets and lab sheets (embedded in bundles) Digital manipulative (embedded in bundles)	<u>Summative Assessments</u> • Analysis of extreme Connecticut weather dating back to 1895, and forecasting of future extreme weather possibilities based on data, trends, and information gained from this unit. <u>Formative Assessments</u> • Water Cycle Model Lab and Report • Written assessment of local climate • Atmospheric Pressure Lab and Report • Isobar Maps • Model (flow of energy and cycling of matter in Earth's atmosphere and oceans.)

Seymour Public Schools Curriculum

UNIT 3- The purpose of this unit is for students to become aware of how a host contracts Lyme Disease. They will begin to understand the characteristics of living things, will investigate different cells and their structures, and will identify how the different subsystems of the body work.

Phenomenon: **Grade:** **Time Frame: (# of weeks, etc)**	**Lyme Disease** **6** **8 Weeks**
NGSS Overarching Standards	• MS-LS1-1 Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells. • MS-LS1-2 Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function • MS-LS1-3 Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells. • MS-LS1-8 Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories. • MS-ETS1-1 Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.
Enduring Understanding	• While the scales of organisms may be significantly different, there are seven characteristics that remain the same. • Within cells, special structures are responsible for particular functions. • The body is a system of multiple interacting subsystems that work together to form tissues and organs. • Sense receptors respond to different inputs, transmit them as signals to the brain, which are then processed by the brain and result in immediate behaviors or memories.
Essential Questions	• What characteristics do all living things have in common? • How are cells organized? • Does the structure of a cell provide evidence for its function? • How do tissues organize themselves to create a complex organism? • How do the body's subsystems interact? • How does the nervous system respond to stimuli?
CCSS Connections **Priority**	ELA/6ELA/Literacy - • WHST.6-8.7 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.(MS-LS1-1)

Seymour Public Schools Curriculum

Standards	• SL.8.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. (MS-LS1-2) • RST.6-8.1 Cite specific textual evidence to support analysis of science and technical texts. (MS-LS1-3)(MS-ETS1-1) • RI.6.8 Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not. (MS-LS1-3) • WHST.6-8.1 Write arguments focused on discipline content. (MS-LS1-3) • WHST.6-8.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. (MS-LS1-8)(MS-ETS1-1) Mathematics – • 6.EE.C.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. (MS-LS1-1)(MS-LS1-3) • 6.EE.C.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, interms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. (MS-LS1-2) • MP.2 Reason abstractly and quantitatively. (MS-ETS1-1) • 7.EE.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. (MS-ETS1-1)
Performance Expectations **(Student outcomes: what students will know/understand**	Students will: • Begin the creation of a model of Lyme Disease transmission. • Generate questions about what else they need to understand in order to solve the problem of Lyme Disease prevention. • Understand that all living things exhibit seven of the same characteristics, and while the scales of these organisms may be significantly different, the characteristics remain the same. • Develop an argument and present evidence in class discussions. • Understand that different cells have different functions.

and be able to do)	• Develop a model analogy that will enable them to explain how internal structures of a cell support the whole cell system. • Understand the interaction between the systems. • Engage in an argument to support the idea that subsystems are specialized for particular body functions within a complex body system, citing evidence to support their arguments. • Understand how sense receptors function. • Conduct an investigation to produce and use data as evidence to support that the nervous system responds to stimuli through the interaction of body systems. • Design solutions for preventing the transmission of Lyme Disease in Connecticut.

Strategies (examples)	**Materials/Resources (examples)**	**Assessments (examples)**
• Planning and Carrying Out Investigations. (Conduct an investigation to produce data to serve as the basis for evidence that meet the goals of an investigation) • Developing and Using Models. (Develop and use a model to describe phenomena) • Engaging in Argument from Evidence (Use an oral and written argument supported by evidence to support or refute an explanation or a model for a phenomenon) • Obtaining, Evaluating, and Communicating Information. (Gather, read, and synthesize information from multiple sources and assess credibility. Describe how they are supported or not supported by evidence.) • Asking Questions and Defining Problems. (Define a design problem that can be solved through the development of an object, tool, process or system.) • Class discussions • Lab experiments	Pond water Prepared slides (unicellular and multicellular organisms) Beakers Water Dish soap Corn syrup Bendable straws String Spool of thread Dissected specimens System models Stethoscope Alcohol wipes Stopwatches Apples and potatoes Peelers Snack bags Pennies (variety of years from 1960-present) Trays and buckets Ice Hand mirrors Video clips (embedded in CREC bundles) Articles (embedded in bundles) Worksheets and lab sheets (embedded in bundles) Digital manipulatives (embedded in bundles)	<u>Summative Assessments</u> • Design a public service announcement about the dangers of Lyme Disease and how to prevent the transmission of Lyme Disease, or develop a plan for a Connecticut park that reduces the transmission of Lyme Disease, and informs park goers of the dangers related to the transmission of Lyme Disease. <u>Formative Assessments</u> • Timeline or storyline that depicts the steps involved in the transmission of Lyme Disease. • Ooblek the Martian Activity (living and non-living characteristics of a car). • Cell Kingdom Analogy Presentation • Heart Rate Experiment • Reaction Time Lab

Seymour Public Schools Curriculum

UNIT 4-The purpose of this unit is for students to become aware of how a host contracts Lyme Disease. They will begin to understand the characteristics of living things, will investigate different cells and their structures, and will identify how the different subsystems of the body work.

Phenomenon: **Grade:** **Time Frame: (# of weeks, etc)**	**Declining Bee Population** **6** **8 Weeks**
NGSS Overarching Standards	• MS-LS1-3 Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells. • MS-LS1-4 Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively. • MS-LS1-5 Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms. • MS-LS1-8 Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories. • MS-LS3-2 Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation.
Enduring Understanding	• The declining bee population could have a potentially harmful impact on human food production. • Animals' ability to sense and communicate enables them to survive and reproduce. • Animal actions and plant specialized plant structures affect the probability of successful reproduction. • Organisms reproduce, either sexually or asexually, and transfer genetic information to their offspring. • Simple models and mathematical thinking can be used to predict the probability of traits occurring.
Essential Questions	• Why does the declining bee population matter? • How do animals sense and react to their world? • How do plants and animals improve their ability to reproduce? • How do traits get passed on to organisms? • How can we predict the probability of traits occurring?
CCSS Connections **Priority Standards**	ELA/Literacy – • RST.6-8.1 Cite specific textual evidence to support analysis of science and technical texts. (MS-LS1-3) • RST.6-8.2 Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. *(MS-LS1-5)*

	• RST.6-8.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics. *(MS-LS3-2)* • RST.6-8.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). (MS-LS3-2) • RI.6.8 Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.(MS-LS1-3) • WHST.6-8.1 Write arguments focused on discipline content. (MS-LS1-3) • WHST.6-8.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. *(MS-LS1-5)* • WHST.6-8.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. (MS-LS1-8) • WHST.6-8.9 Draw evidence from informational texts to support analysis, reflection, and research. (MS-LS1-5) • *SL.8.5* Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.*(MS-LS3-2)* Mathematics – • 6.EE.C.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. *(MS-LS1-3)* • 6.SP.A.2 Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape. *(MS-LS1-4)* • 6.SP.B.4 Summarize numerical data sets in relation to their context. *(MS-LS1-4)* • MP.4 Model with mathematics. *(MS-LS3-2)* • 6.SP.B.5 Summarize numerical data sets in relation to their context. *(MS-LS3-2)*

Seymour Public Schools Curriculum

Performance Expectations **(Student outcomes: what students will know/understand and be able to do)**	Students will: • Understand the relationship between bees and plants. • Generate questions about the potential causes of the declining bee population. • Identify ways that animals communicate with one another. • Understand the importance of communication in survival and reproduction. • Develop an argument supported with evidence. • Understand the idea of dependency (Ex. Plants depending on bees). • Identify causes for the decline in bee population, and its impact on other living things. • Explore the factors for successful reproduction. • Understand probability and inheritance of traits in reproduction. • Understand the difference between sexual and asexual reproduction. • Explain the cause-and-effect relationship between genetics and physical or behavioral traits. • Explain how genetics may be causing the declining bee population. • Develop a model to predict the likelihood of a trait. • Utilize mathematical thinking to predict the likelihood of a trait. • Identify the factors that affect bee populations and ultimately their impact on humans.

Strategies (examples)	**Materials/Resources (examples)**	**Assessments (examples)**
• Engaging in Argument from Evidence (Use an oral and written argument, supported by evidence, to support or refute an explanation or a model for a phenomenon.) • Constructing Explanations and Designing Solutions (Construct a scientific explanation based on valid and reliable evidence obtained from sources.) • Obtaining, Evaluating, and Communicating Information (Gather, read, and synthesize information from multiple sources and describe how they are supported or not supported by evidence.) • Developing and Using Models (Develop and use a model to describe phenomena.) • Class discussions • Lab experiments	Coins Lilies for dissection Dried bees Variety of fresh flowers Magnifying glasses Video clips (embedded in CREC bundles) Articles (embedded in bundles) Worksheets and lab sheets (embedded in bundles) Digital manipulatives (embedded in bundles)	<u>Summative Assessments</u> • Albert Einstein is believed to have once said,**"If the bee disappeared off the face of the Earth, man would only have four years left to live."**Create a model that shows why Einstein's prediction about food availability might be true. <u>Formative Assessments</u> • Bee/flower exploration lab and report • Model of how flowers can reproduce sexually or asexually. • Model of likelihood of traits.