



**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
<p>Unit 1: Pest Identification: What is a Pest?</p> <p>Background: Understanding the Organism</p>		<p><i>NOTE: Background information in Unit 1 is based on a variety of foundational CT Science Standards, including 1.2 (Structure and Function), which deals with animal life cycles; 2.2 (Structure and Function) which deals with plant life cycles; 3.2 (Heredity and Evolution), which deals with adaptations; and 4.2 and 6.2 (Matter and Energy in Ecosystems), which deal with ecosystems.</i></p>		
<p>Unit 1: Pest Identification: What is a Pest?</p> <p>Lesson 1: More Than Just Dust Bunnies**</p>	<p>C INQ.1: Identify questions that can be answered through scientific investigation.</p> <p>C INQ.5: Use appropriate tools and techniques to make observations and gather data.</p> <p>C INQ.7: Identify and present relationships between variables in appropriate graphs.</p>	<p>HEREDITY AND EVOLUTION</p> <p><i>NOTE: This lesson is more closely aligned with CT Science Standard 3.2 (Heredity and Evolution), which deals with adaptations.</i></p> <p>3.2 – Organisms can survive and reproduce only in environments that meet their basic needs.</p> <ul style="list-style-type: none"> 3.2.a. – Plants and animals 	<p>Standard 3.2:</p> <ol style="list-style-type: none"> Compare and contrast the external features and behaviors that enable different animals and plants (including those that are extinct) to get food, water and sunlight; find mates; and be protected in specific land and water habitats. 	<p>B3. Describe how different plants and animals are adapted to obtain air, water, food and protection in specific land habitats.</p> <p>B4. Describe how different plants and animals are adapted to obtain air, water, food and protection in water habitats.</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
	<p>CINQ. 9 Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p>have structures and behaviors that help them survive in different environments.</p>	<p>4. Evaluate whether an adaptation gives a plant or animal a survival advantage in a given environment.</p>	
<p>Unit 1: Pest Identification: What is a Pest?</p> <p>Lesson 2: A Weed By Any Other Name**</p>	<p>C INQ.1: Identify questions that can be answered through scientific investigation.</p> <p>C INQ.5: Use appropriate tools and techniques to make observations and gather data.</p> <p>C INQ.6: Use mathematical operations to analyze and interpret data.</p> <p>C INQ.7: Identify and present relationships between variables</p>	<p>HEREDITY AND EVOLUTION</p> <p><i>NOTE: This lesson is more closely aligned with CT Science Standard 3.2 (Heredity and Evolution), which deals with adaptations.</i></p> <p>3.2 – Organisms can survive and reproduce only in environments that meet their basic needs.</p> <ul style="list-style-type: none"> 3.2.a. – Plants and animals have structures and behaviors that help them survive in different 	<p>Standard 3.2:</p> <p>1. Compare and contrast the external features and behaviors that enable different animals and plants (including those that are extinct) to get food, water and sunlight; find mates; and be protected in specific land and water habitats.</p>	<p>B3. Describe how different plants and animals are adapted to obtain air, water, food and protection in specific land habitats.</p> <p>B4. Describe how different plants and animals are adapted to obtain air, water, food and protection in water habitats.</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
	<p>in appropriate graphs.</p> <p>CINQ. 9 Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p>environments.</p>		
<p>Unit 1: Pest Identification: What is a Pest?</p> <p>Lesson 3: Dormant Demons</p>	<p>C INQ.1: Identify questions that can be answered through scientific investigation.</p> <p>C INQ.3: Design and conduct appropriate types of scientific investigations to answer different questions.</p> <p>C INQ.5: Use appropriate tools and techniques to make observations and gather data.</p>	<p>HEREDITY AND EVOLUTION</p> <p><i>NOTE: This lesson is more closely aligned with CT Science Standards 2.3 (The Changing Earth), which deals with the properties of soils; and 3.2 (Heredity and Evolution), which deals with adaptations.</i></p> <p>2.3 – Earth materials have varied physical properties that make them useful in different ways.</p>	<p>Standard 2.3:</p> <p>5. Conduct fair tests to investigate how different soil types affect plant growth and write conclusions supported by evidence.</p> <p>Standard 3.2:</p> <p>1. Compare and contrast the external features and behaviors that enable different animals and</p>	<p>A22. Relate the properties of different soils to their capacity to retain water and support the growth of certain plants.</p> <p>B3. Describe how different plants and animals are adapted to obtain air, water, food and protection in specific land habitats.</p> <p>B4. Describe how different</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
	<p>C INQ.6: Use mathematical operations to analyze and interpret data.</p> <p>CINQ. 9 Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<ul style="list-style-type: none"> 2.3.a – Soils can be described by their color, texture and capacity to retain water. <p>3.2 – Organisms can survive and reproduce only in environments that meet their basic needs.</p> <ul style="list-style-type: none"> 3.2.a. – Plants and animals have structures and behaviors that help them survive in different environments. 	<p>plants (including those that are extinct) to get food, water and sunlight; find mates; and be protected in specific land and water habitats.</p>	<p>plants and animals are adapted to obtain air, water, food and protection in water habitats.</p>
<p>Unit 1: Pest Identification: What is a Pest?</p> <p>Lesson 4: Johnny Appleseed Would Be Proud**</p>	<p>C INQ.1: Identify questions that can be answered through scientific investigation.</p> <p>C INQ.2: Read, interpret and examine the credibility of scientific claims in different sources of information.</p> <p>CINQ. 9 Provide explanations to investigated problems or</p>	<p>MATTER AND ENERGY IN ECOSYSTEMS</p> <p>4.2 – All organisms depend on the living and nonliving features of the environment for survival.</p> <ul style="list-style-type: none"> 4.2.a. – When the environment changes, some organisms survive and reproduce, and others die or move to new 	<p>Standard 4.2:</p> <p>5. Distinguish between naturally occurring changes in ecosystems and those caused by human activity.</p> <p>6. Predict the effect an environmental change, such as drought or forest destruction, might have</p>	<p>B11. Describe how natural phenomena and some human activities may cause changes to habitats and their inhabitants.</p> <p>C4. Describe how abiotic factors, such as temperature, water and sunlight, affect the ability of plants to create their own</p>



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
	<p>questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p>locations.</p> <p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply. <p align="center">SCIENCE AND TECHNOLOGY IN SOCIETY</p> <p>7.4 – Technology allows us to improve food production and preservation, thus improving our ability to meet the nutritional needs of growing populations</p> <ul style="list-style-type: none"> 7.4.a. – Various microbes compete with humans for the same sources of food 	<p>on the community of living things.</p> <p>Standard 6.2:</p> <ol style="list-style-type: none"> Analyze and interpret how biotic and abiotic factors interact within a given ecosystem. Predict what will happen to a population based upon current trends (fires, disease, overhunting, development) and defend the prediction. <p>Standard 7.4:</p> <ol style="list-style-type: none"> Investigate and describe in writing different types of microbes and the environmental conditions necessary for their survival. Describe the optimum 	<p>food through photosynthesis.</p>

<i>Unit / Lesson</i> ** = Core Lessons	<i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i>	<i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i>	<i>Grade-Level Expectations</i> <i>Students should be able to:</i>	<i>Assessment / CMT Expected Performances supported by this activity</i>
---	---	---	---	--

			conditions for rapid bacterial growth.	
Unit 2: Pest Control Methods Section 1: Biological / Natural Controls Background: Biological Pest Control		<i>NOTE: Background information in Unit 2 is based on a variety of foundational CT Science Standards, including 1.2 (Structure and Function), which deals with animal life cycles; 2.2 (Structure and Function) which deals with plant life cycles; 3.2 (Heredity and Evolution), which deals with adaptations; and 4.2 and 6.2 (Matter and Energy in Ecosystems), which deal with ecosystems.</i>		
Unit 2: Pest Control Methods Section 1: Biological / Natural Controls Lesson 1: Ant Antics	C INQ.1: Identify questions that can be answered through scientific investigation. C INQ.2: Read, interpret and examine the credibility of scientific claims in different sources of information.	MATTER AND ENERGY IN ECOSYSTEMS 4.2 – All organisms depend on the living and nonliving features of the environment for survival. <ul style="list-style-type: none"> 4.2.a. – When the environment changes, some organisms survive 	Standard 4.2: 5. Distinguish between naturally occurring changes in ecosystems and those caused by human activity. 6. Predict the effect an environmental change,	B11. Describe how natural phenomena and some human activities may cause changes to habitats and their inhabitants.



**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
	<p>C INQ.4: Identify independent and dependent variables, and those variables that are kept constant, when designing an experiment.</p> <p>C INQ.5: Use appropriate tools and techniques to make observations and gather data.</p> <p>C INQ.8: Draw conclusions and identify sources of error.</p> <p>C INQ. 9 Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p>and reproduce, and others die or move to new locations.</p> <p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply. 	<p>such as drought or forest destruction, might have on the community of living things.</p> <p>Standard 6.2:</p> <ol style="list-style-type: none"> Analyze and interpret how biotic and abiotic factors interact within a given ecosystem. 	
<p>Unit 2: Pest Control Methods</p>	<p>C INQ.1: Identify questions that can be answered through</p>	<p>MATTER AND ENERGY IN ECOSYSTEMS</p>	<p>Standard 6.2:</p> <ol style="list-style-type: none"> Identify local examples of 	<p>C5. Explain how populations are affected by</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<i>Unit / Lesson</i> ** = Core Lessons	<i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i>	<i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i>	<i>Grade-Level Expectations Students should be able to:</i>	<i>Assessment / CMT Expected Performances supported by this activity</i>
<p>Section 1: Biological / Natural Controls</p> <p>Lesson 2: There's No Such Thing as a Free Lunch</p>	<p>scientific investigation.</p> <p>C INQ.3: Design and conduct appropriate types of scientific investigations to answer different questions</p> <p>C INQ.4: Identify independent and dependent variables, and those variables that are kept constant, when designing an experiment.</p> <p>C INQ.5: Use appropriate tools and techniques to make observations and gather data.</p> <p>C INQ.7: Identify and present relationships between variables in appropriate graphs.</p> <p>CINQ. 9 Provide explanations to investigated problems or questions.</p>	<p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.b. – Populations in ecosystems can be categorized as producers, consumers and decomposers of organic matter. 	<p>predator-prey relationships and justify the impact of each type of population on the other.</p> <p>8. Create and interpret graphs that illustrate the fluctuation of populations over time.</p>	<p>predator-prey relationships.</p>





University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
	<p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>			
<p>Unit 2: Pest Control Methods</p> <p>Section 1: Biological / Natural Controls</p> <p>Lesson 3: Friend or Foe? **</p>	<p>C INQ.1: Identify questions that can be answered through scientific investigation.</p> <p>C INQ.2: Read, interpret and examine the credibility of scientific claims in different sources of information.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p align="center">MATTER AND ENERGY IN ECOSYSTEMS</p> <p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply. 	<p>Standard 6.2:</p> <ol style="list-style-type: none"> Analyze and interpret how biotic and abiotic factors interact within a given ecosystem. Identify local examples of predator-prey relationships and justify the impact of each type of population on the other. Predict what will happen to a population based upon current trends (fires, disease, overhunting, development) and defend the prediction. 	<p>C5. Explain how populations are affected by predator-prey relationships.</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
<p>Unit 2: Pest Control Methods</p> <p>Section 2: Chemical Control</p> <p>Background: Chemical Pest Control</p>		<p><i>NOTE: Background information in Unit 3 addresses CT Science Standards 1.2 (Structure and Function), which deals with animal life cycles; 2.2 (Structure and Function) which deals with plant life cycles; 3.2 (Heredity and Evolution), which deals with adaptations; 4.2 and 6.2 (Matter and Energy in Ecosystems), which deal with ecosystems; and 6.4 (Science and Technology in Society), which deals with the impact of human activity on water resources.</i></p>		
<p>Unit 2: Pest Control Methods</p> <p>Section 2: Chemical Control</p> <p>Lesson 4: Weather vs. Whether</p>	<p>C INQ.1: Identify questions that can be answered through scientific investigation.</p> <p>C INQ.3: Design and conduct appropriate types of scientific investigations to answer different questions</p>	<p><i>ENERGY IN THE EARTH'S SYSTEMS</i></p> <p>6.3 – Variations in the amount of the sun’s energy hitting the earth’s surface affects daily and seasonal weather patterns.</p> <ul style="list-style-type: none"> 6.3.a. – Local and regional weather are affected by the 	<p>Standard 6.3:</p> <p>2. Demonstrate how changes in temperature, pressure, moisture and density of air affect weather patterns (e.g., air masses and air pressure.)</p>	<p>C7. Describe the effect of heating on the movement of molecules in solids, liquids and gases.</p> <p>C8. Explain how local weather conditions are related to the temperature, pressure and water content</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
	<p>C INQ.4: Identify independent and dependent variables, and those variables that are kept constant, when designing an experiment.</p> <p>C INQ.5: Use appropriate tools and techniques to make observations and gather data.</p> <p>C INQ.8: Draw conclusions and identify sources of error.</p> <p>C INQ. 9 Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p>amount of solar energy the area receives and proximity to a large body of water.</p>	<p>4. Investigate and report on how the introduction of heat affects the motion of particles and the distance between them.</p>	<p>of the atmosphere and the proximity to a large body of water.</p>
<p>Unit 2: Pest Control Methods</p>	<p>C INQ.1: Identify questions that can be answered through</p>	<p>SCIENTIFIC INQUIRY AND SCIENTIFIC LITERACY</p>	<p>N/A</p>	<p>Scientific Inquiry, Literacy, and Numeracy skills are</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
<p>Section 2: Chemical Control</p> <p>Lesson 5: Pesticide Wise**</p>	<p>scientific investigation.</p> <p>C INQ.2: Read, interpret and examine the credibility of scientific claims in different sources of information.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p><i>This lesson focuses on Scientific Inquiry and Scientific Literacy, integral parts of the Content Standards for each grade level in the Grades 6-8 Core Scientific Inquiry, Literacy and Numeracy standards.</i></p> <ul style="list-style-type: none"> • Scientific inquiry progresses through a continuous process of questioning, data collection, analysis and interpretation. • Scientific inquiry requires the sharing of findings and ideas for critical review by colleagues and other scientists. • Scientific literacy includes speaking, listening, presenting, interpreting, reading and writing about 		<p>integrated into CMT Expected Performances</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
		<p>science.</p> <ul style="list-style-type: none"> Scientific literacy also includes the ability to search for and assess the relevance and credibility of scientific information found in various print and electronic media. 		
<p>Unit 2: Pest Control Methods</p> <p>Section 2: Chemical Control</p> <p>Lesson 6: Time Trials**</p>	<p>C INQ.1: Identify questions that can be answered through scientific investigation.</p> <p>C INQ.3: Design and conduct appropriate types of scientific investigations to answer different questions</p> <p>C INQ.5: Use appropriate tools and techniques to make observations and gather data.</p> <p>C INQ.6: Use mathematical operations to analyze and</p>	<p>SCIENCE AND TECHNOLOGY IN SOCIETY</p> <p>6.4 – Water moving across and through earth materials carries with it the products of human activities.</p> <ul style="list-style-type: none"> 6.4.a. – Most precipitation that falls on Connecticut eventually reaches Long Island Sound. 	<p>Standard 6.4:</p> <p>4. Investigate and explain in writing how substances, both harmful and beneficial, dissolve in and are carried by surface and ground water.</p>	<p>C10. Explain the role of septic and sewage systems on the quality of surface and ground water.</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
	<p>interpret data.</p> <p>CINQ. 9 Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>			
<p>Unit 2: Pest Control Methods</p> <p>Section 2: Chemical Control</p> <p>Lesson 7: Fact or Fiction</p>	<p>C INQ.2: Read, interpret and examine the credibility of scientific claims in different sources of information.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p>SCIENTIFIC LITERACY <i>This lesson focuses on Scientific Literacy, an integral part of the Content Standards for each grade level in the Grades 6-8 Core Scientific Inquiry, Literacy and Numeracy standards.</i></p> <ul style="list-style-type: none"> Scientific literacy includes speaking, listening, presenting, interpreting, reading and writing about science. 	<p align="center">N/A</p>	<p>Scientific Inquiry, Literacy, and Numeracy skills are integrated into CMT Expected Performances</p>





University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
		<ul style="list-style-type: none"> Scientific literacy also includes the ability to search for and assess the relevance and credibility of scientific information found in various print and electronic media. 		
<p>Unit 2: Pest Control Methods</p> <p>Section 3: Cultural, Mechanical, Regulatory Control</p> <p>Lesson 8: “GM”...It’s Not Just a Car Anymore!**</p>	<p>C INQ.1: Identify questions that can be answered through scientific investigation.</p> <p>C INQ.2: Read, interpret and examine the credibility of scientific claims in different sources of information.</p> <p>C INQ.7: Identify and present relationships between variables in appropriate graphs.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science</p>	<p><i>SCIENTIFIC INQUIRY, SCIENTIFIC LITERACY, and SCIENTIFIC NUMERACY</i> <i>This lesson focuses on Scientific Inquiry, Literacy, and Numeracy, integral parts of the Content Standards for each grade level in the Grades 6-8 Core Scientific Inquiry, Literacy and Numeracy standards.</i></p> <ul style="list-style-type: none"> Scientific inquiry is a thoughtful and coordinated attempt to search out, describe, explain and predict natural 	<p align="center">N/A</p>	<p>Scientific Inquiry, Literacy, and Numeracy skills are integrated into CMT Expected Performances</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
	<p>vocabulary, supporting evidence and clear logic.</p>	<p>phenomena.</p> <ul style="list-style-type: none"> • Scientific inquiry progresses through a continuous process of questioning, data collection, analysis and interpretation. • Scientific inquiry requires the sharing of findings and ideas for critical review by colleagues and other scientists. • Scientific literacy includes speaking, listening, presenting, interpreting, reading and writing about science. • Scientific literacy also includes the ability to search for and assess the relevance and credibility 		





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
		<p>of scientific information found in various print and electronic media.</p> <ul style="list-style-type: none"> Scientific numeracy includes the ability to use mathematical operations and procedures to calculate, analyze and present scientific data and ideas. 		
<p>Unit 2: Pest Control Methods</p> <p>Section 3: Cultural, Mechanical, Regulatory Control</p> <p>Lesson 9: Hopper Hunt**</p>	<p>C INQ.6: Use mathematical operations to analyze and interpret data.</p> <p>C INQ.9: Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p>SCIENTIFIC NUMERACY <i>This lesson focuses on Scientific Numeracy, an integral part of the Content Standards for each grade level in the Grades 6-8 Core Scientific Inquiry, Literacy and Numeracy standards.</i></p> <ul style="list-style-type: none"> Scientific numeracy includes the ability to use mathematical operations and procedures to calculate, analyze and 	<p align="center">N/A</p>	<p>Scientific Inquiry, Literacy, and Numeracy skills are integrated into CMT Expected Performances</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<i>Unit / Lesson</i> ** = Core Lessons	<i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i>	<i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i>	<i>Grade-Level Expectations</i> <i>Students should be able to:</i>	<i>Assessment / CMT Expected Performances supported by this activity</i>
		present scientific data and ideas.		
Unit 2: Pest Control Methods Section 3: Cultural, Mechanical, Regulatory Control Lesson 10: Design a Landscape	<p>C INQ.1: Identify questions that can be answered through scientific investigation.</p> <p>C INQ.2: Read, interpret and examine the credibility of scientific claims in different sources of information.</p> <p>C INQ.9: Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p>MATTER AND ENERGY IN ECOSYSTEMS</p> <p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply. 	<p>Standard 6.2:</p> <p>1. Analyze and interpret how biotic and abiotic factors interact within a given ecosystem.</p> <p>10. Explain the impact of environmental conditions such as climate, elevation, topography or water quality on food chains.</p> <p>11. Predict what will happen to a population based upon current trends (fires, disease, overhunting, development) and defend the prediction.</p>	<p>C4. Describe how abiotic factors, such as temperature, water and sunlight, affect the ability of plants to create their own food through photosynthesis.</p>
Unit 2: Pest Control Methods	C INQ.2: Read, interpret and examine the credibility of	SCIENTIFIC LITERACY <i>This lesson focuses on Scientific</i>	N/A	Scientific Inquiry, Literacy, and Numeracy skills are





University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
<p>Section 3: Cultural, Mechanical, Regulatory Control</p> <p>Lesson 11: Environmental Entrepreneurs</p>	<p>scientific claims in different sources of information.</p>	<p><i>Literacy, an integral part of the Content Standards for each grade level in the Grades 6-8 Core Scientific Inquiry, Literacy and Numeracy standards.</i></p> <ul style="list-style-type: none"> • Scientific literacy includes speaking, listening, presenting, interpreting, reading and writing about science. • Scientific literacy also includes the ability to search for and assess the relevance and credibility of scientific information found in various print and electronic media. 		<p>integrated into CMT Expected Performances</p>
<p>Unit 2: Pest Control Methods</p> <p>Section 3: Cultural, Mechanical,</p>	<p>C INQ.2: Read, interpret and examine the credibility of scientific claims in different sources of information.</p>	<p>SCIENTIFIC LITERACY <i>This lesson focuses on Scientific Literacy, an integral part of the Content Standards for each grade level in the Grades 6-8 Core</i></p>	<p align="center">N/A</p>	<p>Scientific Inquiry, Literacy, and Numeracy skills are integrated into CMT Expected Performances</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
<p>Regulatory Control</p> <p>Lesson 12: Who's Minding the Store?</p>	<p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p><i>Scientific Inquiry, Literacy and Numeracy standards.</i></p> <ul style="list-style-type: none"> • Scientific literacy includes speaking, listening, presenting, interpreting, reading and writing about science. • Scientific literacy also includes the ability to search for and assess the relevance and credibility of scientific information found in various print and electronic media. 		
<p>Unit 2: Pest Control Methods</p> <p>Section 3: Cultural, Mechanical, Regulatory Control</p> <p>Lesson 13: Hygiene</p>	<p>C INQ.1: Identify questions that can be answered through scientific investigation.</p> <p>C INQ.2: Read, interpret and examine the credibility of scientific claims in different sources of information.</p>	<p>MATTER AND ENERGY IN ECOSYSTEMS</p> <p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p>	<p>Standard 6.2:</p> <ol style="list-style-type: none"> 1. Analyze and interpret how biotic and abiotic factors interact within a given ecosystem. 7. Identify local examples of predator-prey 	<p>C5. Explain how populations are affected by predator-prey relationships.</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<i>Unit / Lesson</i> ** = Core Lessons	<i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i>	<i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i>	<i>Grade-Level Expectations</i> <i>Students should be able to:</i>	<i>Assessment / CMT Expected Performances supported by this activity</i>
for Horror	<p>C INQ.9: Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply. 	relationships and justify the impact of each type of population on the other.	
Unit 3: Biodiversity Background: Introduction to Biodiversity		<i>NOTE: Background information in Unit 3 addresses CT Science Standards 6.2 (Matter and Energy in Ecosystems), which deal with ecosystems; 6.4 (Science and Technology in Society), which deals with the effect of human activities on our water resources, and 8.2 (Heredity and Evolution), which deals with genetics.</i>		
Unit 3: Biodiversity Lesson 1: A Picture is	C INQ.2: Read, interpret and examine the credibility of scientific claims in different	MATTER AND ENERGY IN ECOSYSTEMS	Standard 6.2: 8. Create and interpret graphs that illustrate the	N/A





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
<p>Worth 1,000 Words</p>	<p>sources of information.</p> <p>C INQ.7: Identify and present relationships between variables in appropriate graphs.</p> <p>C INQ.9: Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply. 	<p>fluctuation of populations over time.</p>	
<p>Unit 3: Biodiversity</p> <p>Lesson 2: More Than the Spice of Life</p>	<p>C INQ.9: Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p>MATTER AND ENERGY IN ECOSYSTEMS</p> <p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by 	<p>Standard 6.2:</p> <ol style="list-style-type: none"> Analyze and interpret how biotic and abiotic factors interact within a given ecosystem. Compare and contrast how energy and matter flow in a Connecticut ecosystem emphasizing 	<p>C6. Describe common food webs in different Connecticut ecosystems.</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
<p>Unit 3: Biodiversity</p> <p>Lesson 3: E³ - Earth's Endangered Ecosystems</p>	<p>C INQ.1: Identify questions that can be answered through scientific investigation.</p> <p>C INQ.8: Draw conclusions and identify sources of error.</p> <p>C INQ.9: Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p>biotic factors, such as other populations, and abiotic factors, such as soil and water supply.</p> <p>MATTER AND ENERGY IN ECOSYSTEMS</p> <p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply. <p>SCIENCE AND TECHNOLOGY IN SOCIETY</p> <p>6.4 – Water moving across and</p>	<p>the interactions among producers, consumers and decomposers.</p> <p>Standard 6.2:</p> <ol style="list-style-type: none"> Analyze and interpret how biotic and abiotic factors interact within a given ecosystem. Investigate and report on the effects of abiotic factors on a plant’s ability to photosynthesize. Compare and contrast how energy and matter flow in a Connecticut ecosystem emphasizing the interactions among producers, consumers and decomposers. <p>10. Explain the impact of</p>	<p>C4. Describe how abiotic factors, such as temperature, water and sunlight, affect the ability of plants to create their own food through photosynthesis.</p> <p>C5. Explain how populations are affected by predator-prey relationships.</p> <p>C6. Describe common food webs in different Connecticut ecosystems.</p> <p>C11. Explain how human activity may impact water resources in Connecticut, such as ponds, rivers and</p>





University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
		<p>through earth materials carries with it the products of human activities.</p> <ul style="list-style-type: none"> • 6.4.a – Most precipitation that falls on Connecticut eventually reaches Long Island Sound 	<p>environmental conditions such as climate, elevation, topography or water quality on food chains.</p> <p>11. Predict what will happen to a population based upon current trends (fires, disease, overhunting, development) and defend the prediction.</p> <p>Standard 6.4:</p> <p>5. Use appropriate maps to locate and identify the major watersheds that drain into Long Island Sound and analyze how the topography influences the way water moves in the Long Island Sound watershed.</p> <p>6. Research and evaluate in</p>	<p>the Long Island Sound ecosystem.</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
<p>Unit 3: Biodiversity</p> <p>Lesson 4: Alien Invaders**</p>	<p>C INQ.1: Identify questions that can be answered through scientific investigation.</p> <p>C INQ.8: Draw conclusions and identify sources of error.</p> <p>C INQ.9: Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p align="center">MATTER AND ENERGY IN ECOSYSTEMS</p> <p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply. <p align="center">SCIENCE AND TECHNOLOGY IN SOCIETY</p> <p>6.4 – Water moving across and</p>	<p>writing the effects of common point- and non-point source pollution in Connecticut.</p> <p>Standard 6.2:</p> <ol style="list-style-type: none"> Analyze and interpret how biotic and abiotic factors interact within a given ecosystem. Investigate and report on the effects of abiotic factors on a plant’s ability to photosynthesize. Compare and contrast how energy and matter flow in a Connecticut ecosystem emphasizing the interactions among producers, consumers and decomposers. <p>10. Explain the impact of</p>	<p>C4. Describe how abiotic factors, such as temperature, water and sunlight, affect the ability of plants to create their own food through photosynthesis.</p> <p>C5. Explain how populations are affected by predator-prey relationships.</p> <p>C6. Describe common food webs in different Connecticut ecosystems.</p> <p>C11. Explain how human activity may impact water resources in Connecticut, such as ponds, rivers and</p>





University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
		<p>through earth materials carries with it the products of human activities.</p> <ul style="list-style-type: none"> • 6.4.a – Most precipitation that falls on Connecticut eventually reaches Long Island Sound 	<p>environmental conditions such as climate, elevation, topography or water quality on food chains.</p> <p>11. Predict what will happen to a population based upon current trends (fires, disease, overhunting, development) and defend the prediction.</p> <p>Standard 6.4:</p> <p>5. Use appropriate maps to locate and identify the major watersheds that drain into Long Island Sound and analyze how the topography influences the way water moves in the Long Island Sound watershed.</p> <p>6. Research and evaluate in</p>	<p>the Long Island Sound ecosystem.</p>



<i>Unit / Lesson</i> ** = Core Lessons	<i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i>	<i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i>	<i>Grade-Level Expectations</i> <i>Students should be able to:</i>	<i>Assessment / CMT Expected Performances supported by this activity</i>
---	---	---	---	--

			writing the effects of common point- and non-point source pollution in Connecticut.	
Unit 3: Biodiversity Lesson 5: Acid Rain Ruin	<p>C INQ.1: Identify questions that can be answered through scientific investigation.</p> <p>C INQ.2: Read, interpret and examine the credibility of scientific claims in different sources of information.</p> <p>C INQ.7: Identify and present relationships between variables in appropriate graphs.</p> <p>C INQ.9: Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science</p>	<p align="center">MATTER AND ENERGY IN ECOSYSTEMS</p> <p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply. <p align="center">SCIENCE AND TECHNOLOGY IN SOCIETY</p> <p>6.4 – Water moving across and</p>	<p>Standard 6.2:</p> <p>1. Analyze and interpret how biotic and abiotic factors interact within a given ecosystem.</p> <p>5. Investigate and report on the effects of abiotic factors on a plant’s ability to photosynthesize.</p> <p>6. Compare and contrast how energy and matter flow in a Connecticut ecosystem emphasizing the interactions among producers, consumers and decomposers.</p> <p>10. Explain the impact of</p>	<p>C4. Describe how abiotic factors, such as temperature, water and sunlight, affect the ability of plants to create their own food through photosynthesis.</p> <p>C5. Explain how populations are affected by predator-prey relationships.</p> <p>C6. Describe common food webs in different Connecticut ecosystems.</p> <p>C11. Explain how human activity may impact water resources in Connecticut, such as ponds, rivers and</p>



University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
	<p>vocabulary, supporting evidence and clear logic.</p>	<p>through earth materials carries with it the products of human activities.</p> <ul style="list-style-type: none"> • 6.4.a – Most precipitation that falls on Connecticut eventually reaches Long Island Sound 	<p>environmental conditions such as climate, elevation, topography or water quality on food chains.</p> <p>11. Predict what will happen to a population based upon current trends (fires, disease, overhunting, development) and defend the prediction.</p> <p>Standard 6.4:</p> <p>5. Use appropriate maps to locate and identify the major watersheds that drain into Long Island Sound and analyze how the topography influences the way water moves in the Long Island Sound watershed.</p> <p>6. Research and evaluate in</p>	<p>the Long Island Sound ecosystem.</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
<p>Unit 3: Biodiversity</p> <p>Lesson 6: Biosphere - Building a Balanced World</p>	<p>C INQ.1: Identify questions that can be answered through scientific investigation.</p> <p>C INQ.3: Design and conduct appropriate types of scientific investigations to answer different questions.</p> <p>CINQ.4: Identify independent and dependent variables, and those variables that are kept constant, when designing an experiment.</p> <p>C INQ.5: Use appropriate tools and techniques to make observations and gather data.</p> <p>C INQ.8: Draw conclusions and</p>	<p>MATTER AND ENERGY IN ECOSYSTEMS</p> <p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply. 	<p>writing the effects of common point- and non-point source pollution in Connecticut.</p> <p>Standard 6.2:</p> <ol style="list-style-type: none"> Analyze and interpret how biotic and abiotic factors interact within a given ecosystem. Express in general terms how plants and other photosynthetic organisms use the sun’s energy. Investigate and report on the effects of abiotic factors on a plant’s ability to photosynthesize. Compare and contrast how energy and matter flow in a Connecticut ecosystem emphasizing 	<p>C4. Describe how abiotic factors, such as temperature, water and sunlight, affect the ability of plants to create their own food through photosynthesis.</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
	<p>identify sources of error.</p> <p>C INQ.9: Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>		<p>the interactions among producers, consumers and decomposers.</p>	
<p>Unit 3: Biodiversity</p> <p>Lesson 7: Building Your Own Biosphere</p>	<p>C INQ.1: Identify questions that can be answered through scientific investigation.</p> <p>C INQ.2: Read, interpret and examine the credibility of scientific claims in different sources of information.</p> <p>C INQ.3: Design and conduct appropriate types of scientific investigations to answer different questions.</p>	<p>MATTER AND ENERGY IN ECOSYSTEMS</p> <p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply. 	<p>Standard 6.2:</p> <ol style="list-style-type: none"> Analyze and interpret how biotic and abiotic factors interact within a given ecosystem. Defend the statement, “The sun is the main source of energy on Earth.” Express in general terms how plants and other photosynthetic organisms 	<p>C4. Describe how abiotic factors, such as temperature, water and sunlight, affect the ability of plants to create their own food through photosynthesis.</p> <p>C6. Describe common food webs in different Connecticut ecosystems.</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
	<p>C INQ.5: Use appropriate tools and techniques to make observations and gather data.</p> <p>C INQ.6: Use mathematical operations to analyze and interpret data.</p> <p>C INQ.7: Identify and present relationships between variables in appropriate graphs.</p> <p>C INQ.8: Draw conclusions and identify sources of error.</p> <p>C INQ.9: Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>		<p>use the sun’s energy.</p> <p>5. Investigate and report on the effects of abiotic factors on a plant’s ability to photosynthesize.</p> <p>6. Compare and contrast how energy and matter flow in a Connecticut ecosystem emphasizing the interactions among producers, consumers and decomposers.</p> <p>8. Create and interpret graphs that illustrate the fluctuation of populations over time.</p> <p>10. Explain the impact of environmental conditions such as climate, elevation, topography or water quality on food</p>	





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<i>Unit / Lesson</i> ** = Core Lessons	<i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i>	<i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i>	<i>Grade-Level Expectations</i> <i>Students should be able to:</i>	<i>Assessment / CMT Expected Performances supported by this activity</i>
---	---	---	---	--

			chains.	
Unit 3: Biodiversity Lesson 8: Exploding Populations	<p>C INQ.1: Identify questions that can be answered through scientific investigation.</p> <p>C INQ.2: Read, interpret and examine the credibility of scientific claims in different sources of information.</p> <p>C INQ.7: Identify and present relationships between variables in appropriate graphs.</p> <p>C INQ.8: Draw conclusions and identify sources of error.</p> <p>C INQ.9: Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science</p>	<p align="center">MATTER AND ENERGY IN ECOSYSTEMS</p> <p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply. 	<p>Standard 6.2:</p> <p>1. Analyze and interpret how biotic and abiotic factors interact within a given ecosystem.</p> <p>8. Create and interpret graphs that illustrate the fluctuation of populations over time.</p> <p>10. Explain the impact of environmental conditions such as climate, elevation, topography or water quality on food chains.</p>	<p>C4. Describe how abiotic factors, such as temperature, water and sunlight, affect the ability of plants to create their own food through photosynthesis.</p> <p>C5. Explain how populations are affected by predator-prey relationships.</p>



**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<i>Unit / Lesson</i> ** = Core Lessons	<i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i>	<i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i>	<i>Grade-Level Expectations</i> <i>Students should be able to:</i>	<i>Assessment / CMT Expected Performances supported by this activity</i>
---	---	---	---	--

	vocabulary, supporting evidence and clear logic.			
Unit 3: Biodiversity Lesson 9: Consuming Passions	<p>C INQ.2: Read, interpret and examine the credibility of scientific claims in different sources of information.</p> <p>C INQ.8: Draw conclusions and identify sources of error.</p> <p>C INQ.9: Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p>MATTER AND ENERGY IN ECOSYSTEMS</p> <p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply. 	<p>Standard 6.2:</p> <p>1. Analyze and interpret how biotic and abiotic factors interact within a given ecosystem.</p> <p>11. Predict what will happen to a population based upon current trends (fires, disease, overhunting, development) and defend the prediction.</p>	
Unit 3: Biodiversity Lesson 10: Biodiversity in Your Own Backyard**	<p>C INQ.1: Identify questions that can be answered through scientific investigation.</p> <p>C INQ.2: Read, interpret and examine the credibility of</p>	<p>MATTER AND ENERGY IN ECOSYSTEMS</p> <p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the</p>	<p>Standard 6.2:</p> <p>1. Analyze and interpret how biotic and abiotic factors interact within a given ecosystem.</p>	C4. Describe how abiotic factors, such as temperature, water and sunlight, affect the ability of plants to create their own food through





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
	<p>scientific claims in different sources of information.</p> <p>C INQ.3: Design and conduct appropriate types of scientific investigations to answer different questions.</p> <p>C INQ.5: Use appropriate tools and techniques to make observations and gather data.</p> <p>C INQ.6: Use mathematical operations to analyze and interpret data.</p> <p>C INQ.7: Identify and present relationships between variables in appropriate graphs.</p> <p>C INQ.8: Draw conclusions and identify sources of error.</p> <p>C INQ.9: Provide explanations to investigated problems or</p>	<p>physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply. 	<p>6. Compare and contrast how energy and matter flow in a Connecticut ecosystem emphasizing the interactions among producers, consumers and decomposers.</p> <p>10. Explain the impact of environmental conditions such as climate, elevation, topography or water quality on food chains.</p>	<p>photosynthesis.</p> <p>C5. Explain how populations are affected by predator-prey relationships.</p> <p>C6. Describe common food webs in different Connecticut ecosystems.</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
	<p>questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>			
<p>Biodiversity Enrichment Activities</p> <p>Enrichment Activity 1: Worldwide Advertising Campaign</p>	<p>C INQ.2: Read, interpret and examine the credibility of scientific claims in different sources of information.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p>MATTER AND ENERGY IN ECOSYSTEMS</p> <p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply. 	<p>Standard 6.2:</p> <ol style="list-style-type: none"> Analyze and interpret how biotic and abiotic factors interact within a given ecosystem. Explain the impact of environmental conditions such as climate, elevation, topography or water quality on food chains. 	<p>C4. Describe how abiotic factors, such as temperature, water and sunlight, affect the ability of plants to create their own food through photosynthesis.</p> <p>C5. Explain how populations are affected by predator-prey relationships.</p>
<p>Biodiversity Enrichment Activities</p>	<p>C INQ.2: Read, interpret and examine the credibility of scientific claims in different</p>	<p>MATTER AND ENERGY IN ECOSYSTEMS</p>	<p>Standard 6.2:</p> <ol style="list-style-type: none"> Analyze and interpret how biotic and 	<p>C4. Describe how abiotic factors, such as temperature, water and</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<p><i>Unit / Lesson</i></p> <p>** = Core Lessons</p>	<p><i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i></p>	<p><i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i></p>	<p><i>Grade-Level Expectations</i> <i>Students should be able to:</i></p>	<p><i>Assessment / CMT Expected Performances supported by this activity</i></p>
<p>Enrichment Activity 2: Town Meeting</p>	<p>sources of information.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.</p>	<p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply. 	<p>abiotic factors interact within a given ecosystem.</p> <p>10. Explain the impact of environmental conditions such as climate, elevation, topography or water quality on food chains.</p>	<p>sunlight, affect the ability of plants to create their own food through photosynthesis.</p> <p>C5. Explain how populations are affected by predator-prey relationships.</p> <p>C6. Describe common food webs in different Connecticut ecosystems.</p>
<p>Biodiversity Enrichment Activities</p> <p>Enrichment Activity 3: Conduct a Bioblitz</p>	<p>C INQ.5: Use appropriate tools and techniques to make observations and gather data.</p>	<p>MATTER AND ENERGY IN ECOSYSTEMS</p> <p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as 	<p>Standard 6.2:</p> <p>1. Analyze and interpret how biotic and abiotic factors interact within a given ecosystem.</p>	<p align="center">N/A</p>





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<i>Unit / Lesson</i> ** = Core Lessons	<i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i>	<i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i>	<i>Grade-Level Expectations</i> <i>Students should be able to:</i>	<i>Assessment / CMT Expected Performances supported by this activity</i>
---	---	---	---	--

		other populations, and abiotic factors, such as soil and water supply.		
Biodiversity Enrichment Activities Enrichment Activity 4: How Green is Your Classroom?	<p>C INQ.3: Design and conduct appropriate types of scientific investigations to answer different questions.</p> <p>C INQ.5: Use appropriate tools and techniques to make observations and gather data.</p> <p>C INQ.6: Use mathematical operations to analyze and interpret data.</p> <p>C INQ.9: Provide explanations to investigated problems or questions.</p> <p>C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence</p>	<p>MATTER AND ENERGY IN ECOSYSTEMS</p> <p>6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.</p> <ul style="list-style-type: none"> 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply. 	<p>Standard 6.2:</p> <p>1. Analyze and interpret how biotic and abiotic factors interact within a given ecosystem.</p>	N/A





**University of Connecticut Integrated Pest Management
Curriculum Alignment: Grades 7 & 8**



<i>Unit / Lesson</i> ** = Core Lessons	<i>Grades PreK-2 Core Scientific Inquiry, Literacy and Numeracy</i>	<i>CT Science Curriculum Conceptual Themes, Content Standards and Core Science Curriculum Framework</i>	<i>Grade-Level Expectations</i> <i>Students should be able to:</i>	<i>Assessment / CMT Expected Performances supported by this activity</i>
---	---	---	---	--

	and clear logic.			
Biodiversity Enrichment Activities Enrichment Activity 5: Service Learning Project Ideas	C INQ.10: Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.	MATTER AND ENERGY IN ECOSYSTEMS 6.2 – An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact. • 6.2.a. – Populations in ecosystems are affected by biotic factors, such as other populations, and abiotic factors, such as soil and water supply.	Standard 6.2: 1. Analyze and interpret how biotic and abiotic factors interact within a given ecosystem.	N/A

