Unit / Lesson	New England Common	National Science Education	Grade-Level Expectations	Assessment
	Assessment Program	Content Standards	Students should be	
** = Core	Grade Level Expectations		able to:	
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Unit 1: Introduction Lesson 1: What is IPM?** • To understand the purpose and methods of Integrated Pest Management, IPM (SCI, LA)	Students at the Kindergarten and First Grade level are not formally assessed through large scale assessment.	 Unifying Concepts and Processes Standard: As a result of activities in grades K-12, all students should develop understanding and abilities aligned with the following concepts and processes: Systems, order, and organization Evidence, models, and explanation Constancy, change, and measurement Evolution and equilibrium Form and function 	 Count, order and sort objects by their observable properties. 	 Count objects in a group and use mathematical terms to describe quantitative relationships such as: same as, more than, less than, equal, etc.
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Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
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Unit 1:	Students at the Kindergarten	Unifying Concepts and Processes	1.	Make scientific	1.	Describe the
Introduction	and First Grade level are not	• Standard: As a result of		observations using the five		similarities and
	formally assessed through large	activities in grades K-12, all		senses, and distinguish		differences in the
Lesson 2: Maples,	scale assessment.	students should develop		between an object's		appearance and
Mosquitoes, and		understanding and abilities		observable properties and		behaviors of plants,
		aligned with the following		its name or its uses.		birds, fish, insects
Me!		concepts and processes:	2.	Classify organisms or		and mammals
T 1 1		• Systems, order, and		objects by one and two		(including humans).
• To recognize that all		organization		observable properties and		
living things have		• Evidence, models,		explain the rule used for	2.	Describe
basic needs		and explanation		sorting (e.g., size, color,		characteristics that
• To identify the characteristics of		• Constancy, change,		shape, texture or		distinguish living
living things		and measurement		flexibility).		from nonliving
(SCI, LA)		\circ Evolution and	3.	Count, order and sort		things.
(SCI, LA)		equilibrium		objects by their observable		
		• Form and function		properties.		
			4.	obber ve and deberroe		
		Science as Inquiry		differences between living		
		• Content Standard A: As a		and nonliving things in		
		result of activities in grades		terms of growth, offspring		
		K-4, all students should		and need for energy from		
		develop:	-	"food."		
		 Abilities necessary to 	5.	Sort and count living and		
		do scientific inquiry		nonliving things in the		
		• Understanding about		classroom, the schoolyard,		
		scientific inquiry		and in pictures.		

Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
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activities in grades K-4, all classroom, the schoolyard, and students should develop in pictures. understanding of: 6. Observe and write, speak or organisms draw about similarities and organisms differences between plants and organisms organisms organisms organisms organisms organisms

Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
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the Planet and First Grad	 Life Science Content Standard C: As result of activities in grad K-4, all students should develop understanding of The characteristic organisms Life cycles of organisms Organisms and Environments Earth and Space Science Content Standard D: As result of their activities in grades K-4, all students should develop an understanding of: Properties of earth materials Objects in the sky Changes in earth sky 	adesdifferences between plantsdifferences in appearance a behaviors ofof: tics of2. Write, speak or draw ways that weather influences humans, other animals and plants.birds, fish, ir and mammal (including humans)As a inwth ky	nd n the ind plants, nsects s
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Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
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Unit 2: Protecting the Planet Lesson 2: Beauty Has Its Price** *To understand that the demand for "pretty" produce results in the use of chemical control (SCI)	Students at the Kindergarten and First Grade level are not formally assessed through large scale assessment.	 Science as Inquiry Content Standard A: As a result of activities in grades K-4, all students should develop: Abilities necessary to do scientific inquiry Understanding about scientific inquiry Life Science Content Standard C: As a result of activities in grades K-4, all students should develop understanding of: The characteristics of organisms Life cycles of organisms Organisms and Environments 	 Make scientific observations using the five senses, and distinguish between an object's observable properties and its name or its uses. Observe and write, speak or draw about similarities and differences between plants and animals. 	 Use the senses and simple measuring tools, such as rulers and equal-arm balances, to observe common objects and sort them into groups based on size, weight, shape or color. Describe the similarities and differences in the appearance and behaviors of plants, birds, fish, insects and mammals (including humans).
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Unit / Lesson	New England Common	National Science Education	Grade-Level Expectations	Assessment
	Assessment Program	Content Standards	Students should be	
** = Core	Grade Level Expectations		able to:	
Lessons				

the Planet a	Students at the Kindergarten and First Grade level are not formally assessed through large scale assessment.	 Science as Inquiry Content Standard A: As a result of activities in grades K-4, all students should develop: Abilities necessary to do scientific inquiry Understanding about scientific inquiry Life Science Content Standard C: As a result of activities in grades K-4, all students should develop understanding of: The characteristics of organisms Life cycles of organisms Organisms and Environments 	 Make scientific observations using the five senses, and distinguish between an object's observable properties and its name or its uses. Observe and write, speak or draw about similarities and differences between plants and animals. 	 Use the senses and simple measuring tools, such as rulers and equal-arm balances, to observe common objects and sort them into groups based on size, weight, shape or color. Describe the similarities and differences in the appearance and behaviors of plants, birds, fish, insects and mammals (including humans).
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Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
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Unit / Lesson ** = Core	New England Common Assessment Program Grade Level Expectations	National Science Education Content Standards	Grade-Level Expectations Students should be able to:	Assessment
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Unit 3: Know Your Neighbors Lesson 2: Living Like an Insect * To identify the four stages of a caterpillar's life cycle (egg, larva, pupa, adult) (LA, SCI)	Students at the Kindergarten and First Grade level are not formally assessed through large scale assessment.	 Science as Inquiry Content Standard A: As a result of activities in grades K-4, all students should develop: 	1. 2. 3.	Infer from direct observation and print or electronic information that most animals and plants need water food and air to stay alive. Identify structures and behaviors used by mammals, birds, amphibians, reptiles, fish and insects to move around, breathe and obtain food and water (e.g., legs/wings/fins, gills/lungs, claws/fingers, etc.) Compare and contrast information about animals and plants found in fiction and nonfiction sources.	1. 2.	Describe the different ways that animals, including humans, obtain water and food. Describe the changes in organisms, such as frogs and butterflies, as they undergo metamorphosis.
		understanding of:	4.	and nonfiction sources.		

Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
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Unit 3: Know Your Neighbors Lesson 3: Scamper, Skitter, and Crawl** • To recognize the various ways that insects move in their environment • To understand that locomotion is part of an insect's survival technique (LA, SCI)	Students at the Kindergarten and First Grade level are not formally assessed through large scale assessment.	 Science as Inquiry Content Standard A: As a result of activities in grades K-4, all students should develop: Abilities necessary to do scientific inquiry Understanding about scientific inquiry Understanding about scientific inquiry Understandard C: As a result of activities in grades K-4, all students should develop understanding of: The characteristics of organisms Life cycles of organisms Organisms and Environments Living things have different structures and behaviors that allow them to meet their basic needs. 	1.	Observe and write, speak or draw about similarities and differences between plants and animals. Identify structures and behaviors used by mammals, birds, amphibians, reptiles, fish and insects to move around, breathe and obtain food and water (e.g., legs/wings/fins, gills/lungs, claws/fingers, etc.)	1. 2.	Describe the similarities and differences in the appearance and behaviors of plants, birds, fish, insects and mammals (including humans). Describe the structures that animals, including humans, use to move around.
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Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
** = Core	Grade Level Expectations	Comeni Standarus	able to:	
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Unit 3: Know Your	Students at the Kindergarten	Life Science	1. Identify structures and	1. D	Describe the
Neighbors	and First Grade level are not	• Content Standard C: As a	behaviors used by	si	imilarities and
0	formally assessed through large	result of activities in grades	mammals, birds,	d	ifferences in the
Lesson 4: Staying	scale assessment.	K-4, all students should	amphibians, reptiles, fish	aj	ppearance and
Alive		develop understanding of:	and insects to move around,	b	ehaviors of plants,
		• The characteristics of	breathe and obtain food and		irds, fish, insects
* To understand how		organisms	water (e.g., legs/wings/fins,	a	nd mammals
animals adapt to their		 Life cycles of 	gills/lungs, claws/fingers,	(i	including humans).
environment		organisms	etc.)		
(LA, SCI)		 Organisms and 			Describe the
		Environments			tructures that
					nimals, including
		Living things have different structures			umans, use to
		and behaviors that allow them to meet			amouflage
		their basic needs.		tł	nemselves.

Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
** = Core	Grade Level Expectations	Comeni Standarus	able to:	
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Unit 3: Know Your Neighbors Lesson 5: People Need Plants • To identify parts of a plant • To recognize the importance of plants in our daily diet (LA, SCI, Math)	Students at the Kindergarten and First Grade level are not formally assessed through large scale assessment.	 Life Science Content Standard C: As a result of activities in grades K-4, all students should develop understanding of: The characteristics of organisms Life cycles of organisms Organisms and Environments Living things have different structures and behaviors that allow them to meet their basic needs. Plants need air, water and sunlight to survive. 	 Sort and classify plants (or plant parts) by observable characteristics (e.g., leaf shape/size, stem or trunk covering, flower or fruit). 	 Describe the different structures plants have for obtaining water and sunlight.
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Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
** = Core	Grade Level Expectations		able to:	
Lessons				

Unit 3: Know Your Neighbors Lesson 6: Some Seeds Grow Weeds** • To identify the difference between weeds and other plants • To understand the life cycle of a plant (SCI, LA)	Students at the Kindergarten and First Grade level are not formally assessed through large scale assessment.	 Life Science Content Standard C: As a result of activities in grades K-4, all students should develop understanding of: The characteristics of organisms Life cycles of organisms Organisms and Environments Living things have different structures and behaviors that allow them to meet their basic needs. Plants need air, water and sunlight to survive. 	 Sort and classify plants (or plant parts) and weeds by observable characteristics (e.g., leaf shape/size, stem or trunk covering, flower or fruit). 	 Identify and describe how a seed grows, and the parts of a plant. Identify a weed, and describe the best and safest way (physical control) of elimination.
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Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
** = Core	Grade Level Expectations		able to:	
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Unit 3: Know Your	Students at the Kindergarten	Life Science	1.	Observe and write, speak or	1.	Describe the similarities
Unit 3: Know Your Neighbors Lesson 7: Merrily We Move Along (How Seeds Travel) • To identify how a plant grows • To determine and understand methods by which seeds travel to plant themselves (SCI)	Students at the Kindergarten and First Grade level are not formally assessed through large scale assessment.	 Life Science Content Standard C: As a result of activities in grades K-4, all students should develop understanding of: The characteristics of organisms Life cycles of organisms Organisms and Environments Living things have different structures and behaviors that allow them to meet their basic needs. Plants need air, water and sunlight to survive. 	 1. 2. 3. 4. 	 draw about similarities and differences between plants and animals. Infer from direct observation and print or electronic information that most animals and plants need water food and air to stay alive. Sort and classify plants (or plant parts) by observable characteristics (e.g., leaf shape/size, stem or trunk covering, flower or fruit). Compare and contrast how seeds of different plants are 	1.	Describe the similarities and differences in the appearance and behaviors of plants, birds, fish, insects and mammals (including humans). Describe the different structures plants have for obtaining water and sunlight.
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Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
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Unit 4: Pest or Pal Lesson 1: The Good, the Bad, and the Ugly** • To identify some of the important roles insects play on the Earth • To identify insects that are harmful or helpful to the environment (SCI, Math)	Students at the Kindergarten and First Grade level are not formally assessed through large scale assessment.	 Life Science Content Standard C: As a result of activities in grades K-4, all students should develop understanding of: The characteristics of organisms Life cycles of organisms Organisms and Environments Earth and Space Science Content Standard D: As a result of their activities in grades K-4, all students should develop an understanding of Properties of earth materials Objects in the sky Changes in earth and sky 	 Recognize varied individuals as examples of the same kind of living thing (e.g., different color rabbits are all rabbits; different breeds of dogs are all dogs). 	 Describe the similarities and differences in the appearance and behaviors of plants, birds, fish, insects and mammals (including humans). Describe the different ways that animals, including humans, obtain water and food.
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Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
** = Core Lessons	Grade Level Expectations		able to:	

Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
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Unit 4: Pest or Pal Lesson 2: What's Bugging You? • To develop an understanding of the term "pest" • To identify pests that bother people (SCI, Math)	Students at the Kindergarten and First Grade level are not formally assessed through large scale assessment.	 Life Science Content Standard C: As a result of activities in grades K-4, all students should develop understanding of: The characteristics of organisms Life cycles of organisms	 Recognize varied individuals as examples of the same kind of living thing (e.g., different color rabbits are all rabbits; different breeds of dogs are all dogs). 	 Describe the similarities and differences in the appearance and behaviors of plants, birds, fish, insects and mammals (including humans).
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Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
** = Core	Grade Level Expectations		able to:	
Lessons				

Unit 5: IPM Students at the k	ndergarten Life Science	1. Observe and write, speak or 1. Describe the similarities
Unit 5: IPM MethodsStudents at the H and First Grade formally assessed scale assessment.Lesson 1: Ladybugs to the Rescue**scale assessment.• To identify insect body parts • To identify predator/prey relationships that provide biological control of insect pests • To recognize the diversity of life on the Earth (SCI, Math)Students at the H and First Grade formally assessed scale assessment.	vel are not • Content Standard C: As a	 Observe and write, speak or draw about similarities and differences between plants and animals. Infer from direct observation and print or electronic information that most animals and plants need water food and air to stay alive. Identify structures and behaviors used by mammals, birds, amphibians, reptiles, fish and insects to move around, breathe and obtain food and water (e.g., legs/wings/fins, gills/lungs, claws/fingers, etc.) Describe the similarities and differences in the appearance and behaviors of plants, birds, fish, insects and mammals (including humans, obtain water and food. Describe the structures that animals, including humans, use to move around.

Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
** = Core	Grade Level Expectations	Coment Standards	able to:	
Lessons				

Unit 5: IPM Methods Lesson 2: Itsy Bitsy Spider • To recognize the differences between insects and arachnids • To understand why spiders are beneficial	Students at the Kindergarten and First Grade level are not formally assessed through large scale assessment.	Life Science Content Standard C: As a result of activities in grades K-4, all students should develop understanding of: The characteristics of organisms Life cycles of organisms Organisms and Environments 	 Observe and write, speak or draw about similarities and differences between plants and animals. Infer from direct observation and print or electronic information that most animals and plants need water food and air to stay alive. Describe the similarities and differences in the appearance and behaviors of plants, birds, fish, insects and mammals (including humans). Describe the similarities and differences in the appearance and behaviors of plants, birds, fish, insects and mammals (including humans). Describe the different ways that animals, including humans, abtein water and food
(LA, SCI)			 3. Identify structures and behaviors used by mammals, birds, amphibians, reptiles, fish and insects to move around, breathe and obtain food and water (e.g., legs/wings/fins, gills/lungs, claws/fingers, etc.) 3. Describe the structures that animals, including humans, use to move around.

Unit / Lesson	New England Common	National Science Education	Grade-Level Expectations	Assessment
	Assessment Program	Content Standards	Students should be	
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Methods and form	ents at the Kindergarten First Grade level are not ally assessed through large assessment.	 Science and Technology Content Standard E: As a result of activities in grades K-4, all students should develop: Abilities of technological design Understanding about science and technology Abilities to distinguish between natural objects and objects made by humans 	 Seek information in books, magazines and pictures. Present information in words and drawings. 	 Brainstorm, design, construct, and discuss how to make a leprechaun trap.
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Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
** = Core	Grade Level Expectations	Comeni Sianaaras	able to:	
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Unit 5: IPM Methods Lesson 4: Easy as Pie** * To understand that there are alternatives to using chemicals to control pests (LA, SCI)	Students at the Kindergarten and First Grade level are not formally assessed through large scale assessment.	 Life Science Content Standard C: As a result of activities in grades K-4, all students should develop understanding of:	 Make scientific observations using the five senses, and distinguish between an object's observable properties and its name or its uses. 	 Describe tools and actions used to safely control pests.

Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
** = Core	Grade Level Expectations		able to:	
Lessons				

Unit 5: IPM	Students at the Kindergarten	Life Science	1. Compare and contrast	1. Describe the different
Methods	and First Grade level are not	• Content Standard C: As a	information about animals and	ways that animals,
	formally assessed through large	result of activities in grades	plants found in fiction and	including humans, obtain
Lesson 5: Mouse Mess * To determine safe ways to control mice and other "pests" that invade places where food is served and stored. (LA, SCI)	scale assessment.	 K-4, all students should develop understanding of: The characteristics of organisms Life cycles of organisms Organisms and Environments 	nonfiction sources.	water and food.

Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
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Unit 5: IPM Methods Lesson 6: U R LUNCH!** * To recognize that clothing choices can protect a person from pests (SCI, Math)	Students at the Kindergarten and First Grade level are not formally assessed through large scale assessment.	 Life Science Content Standard C: As a result of activities in grades K-4, all students should develop understanding of: The characteristics of organisms Life cycles of organisms Organisms and Environments 	1. Observe and write, speak or draw about similarities and differences between plants and animals.	 Describe the similarities and differences in the appearance and behaviors of plants, birds, fish, insects and mammals (including humans). Describe the different ways that animals, including humans, obtain water and food.
		 Earth and Space Science Content Standard D: As a result of their activities in grades K-4, all students should develop an understanding of Properties of earth materials Objects in the sky Changes in earth and sky 		

Unit / Lesson	New England Common Assessment Program	National Science Education Content Standards	Grade-Level Expectations Students should be	Assessment
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Unit 5: IPM	Students at the Kindergarten	Life Science	1. Make scientific	1. Describe how IPM
Methods Lesson 7: Wrap Up and Review** • To understand that chemical application is not the only solution to pest problems • To discover safer ways than using chemicals to control pests • To understand the need for reducing the use of chemicals in our environment	and First Grade level are not formally assessed through large scale assessment.	 Content Standard C: As a result of activities in grades K-4, all students should develop understanding of: The characteristics of organisms Life cycles of organisms Organisms and Environments Earth and Space Science Content Standard D: As a result of their activities in grades K-4, all students should develop an understanding of Properties of earth materials Objects in the sky Changes in earth and sky 	observations using the five senses, and distinguish between an object's observable properties and its name or its uses.	uses mechanical, physical, and biological methods when dealing with pest problems.

Unit / Lesson ** = Core Lessons	New England Common Assessment Program Grade Level Expectations	National Science Education Content Standards	Grade-Level Expectations Students should be able to:	Assessment
Lessons				