









In-School Program Description





In-School programs are designed so that all learners have equal access to fun, hands-on, standards-based curriculum. Each classroom receives three one-hour visits from a Thorne educator. The first two inquiry-based visits focus on engaging students with content, and the third visit allows students to elaborate on their learning by writing and illustrating a class book on their topic of study. Our programs are closely correlated with Colorado State Academic Standards, and our prompting and questioning techniques reflect the rigor set in the Common Core Standards for Speaking and Listening. All programs are sheltered for diverse learners, incorporating strategies for building background knowledge, review of concepts, comprehensible input, accountable talk, and student-to-student interaction. Multiple classroom visits allow students an in-depth exploration of science standards – fertile ground for developing a positive environmental ethic!

Program	Grade Level	Description	State Science Standards Addressed	Common Core Standards	In Action
Birds	Pre-K Kindergarten 1 st Grade	Students use senses to sort and describe various bird characteristics. Using specimens and realia, students collect, describe, and record information about wings, feet, beaks, nests, and eggs. Comparing and contrasting characteristics, students infer how they help birds survive by trying to catch food with different kinds of beaks.	P.2.1 P.2.2 K.2.1 1.2.2	Participate in collaborative conversations. Build on others' talk by responding through multiple exchanges. Ask and answer questions about key details. Describe familiar places and things with detail.	
Decomposers	Kindergarten 1 st Grade 2 nd Grade	Students participate in the experimental design process to support claims on how worms' characteristics help them survive. An interactive game allows students to describe how worms interact with the living and non-living parts of their habitats.	K.2.1 1.2.1 1.2.2 2.2.1 2.2.2	Participate in collaborative conversations. Build on others' talk by linking their comments to the remarks of others. Ask and answer questions to deepen understanding	

				of a topic.	
Insects	1 st Grade 2 nd Grade	Using realia, students compare, contrast, and sort insect characteristics in order to draw conclusions about advantages of specific structures; and also compare characteristics of parents and offspring. An interactive game allows students to describe how insects interact with the living and non-living parts of their habitats.	1.2.1 1.2.2 2.2.1 2.2.2	Participate in collaborative conversations. Build on others' talk by linking their comments to the remarks of others. Ask and answer questions to deepen understanding of a topic.	
Bats	1 st Grade 2 nd Grade	Through an interactive game, students describe, compare, and contrast bat characteristics in order to how explain how they help bats survive. Students also explore bats' relationship to the living and non-living parts of their habitat, predicting how changing conditions of their habitat affect them.	1.2.2 2.2.1 2.2.2	Participate in collaborative conversations. Build on others' talk by linking their comments to the remarks of others. Ask and answer questions to deepen understanding of a topic.	
Plants	1 st Grade 2 nd Grade	Using realia, students describe, compare, and contrast plant characteristics in order to how explain how they help plants survive. Through an interactive game, students explore plants' relationship to the living and non-living parts of their habitat, analyzing the most important factors for a plants' survival.	1.2.2 2.2.1 2.2.2	Participate in collaborative conversations. Build on others' talk by linking their comments to the remarks of others. Ask and answer questions to deepen understanding of a topic.	
Wetlands	2 nd Grade 3 rd Grade 4 th Grade	Using realia, students explain advantages of specific structures of wetland creatures. Through an interactive game, students use evidence to explain the stages of how organisms change	2.2.1 2.2.2 3.2.1 4.2.1	Engage in a range of collaborative discussions, building on other's ideas. Review key ideas expressed	

		<p>over time, and elaborate the needs of an organism at various times in its life cycle. Students explain how organisms adapt to their habitats and their interactions in an ecosystem.</p>		<p>and draw conclusions in light of information gained.</p> <p>Support claims by reason and using evidence.</p>	
<p>Pass The Energy</p>	<p>3rd Grade 4th Grade 5th Grade 6th Grade</p>	<p>Using realia, students elaborate the needs of an organism at various times in its life cycle, and use evidence to explain similarities/differences among organisms. Through an interactive game, students explain how organisms adapt to their habitats and their interactions in an ecosystem, analyze the relationship between structures and functions in ecosystems, and explain the flow of energy in an ecosystem and the interactions that affect it.</p>	<p>3.2.1 4.2.1 4.2.3 5.2.1 6.2.1 6.2.2</p>	<p>Engage in a range of collaborative discussions, building on other's ideas.</p> <p>Review key ideas expressed and draw conclusions in light of information gained.</p> <p>Support claims by reason and using evidence.</p>	
<p>Colorado Ecology</p>	<p>4th Grade 5th Grade 6th Grade</p>	<p>Using realia, students explain how organisms adapt to their habitats, describe their interactions in an ecosystem, and analyze the relationship between structures and functions in ecosystems. Through an interactive game, students explain how changes in the environment affect survival.</p>	<p>4.2.1 4.2.3 5.2.1 6.2.1 6.2.2</p>	<p>Engage in a range of collaborative discussions, building on other's ideas.</p> <p>Review key ideas expressed and draw conclusions in light of information gained.</p> <p>Support claims by reason and using evidence.</p>	
<p>Wind / Solar</p>	<p>4th Grade 5th Grade 6th Grade</p>	<p>Through an experimental design process, students evaluate how energy can be transferred and stored, ask testable</p>	<p>4.1.1 5.3.1 6.1.2</p>	<p>Engage in a range of collaborative discussions, building on other's ideas.</p>	

		<p>questions about energy, explain the origin, utilization, and concerns associated with natural resource use, and evaluate the distribution of resources and advantages and disadvantages of utilizing those resources for our needs. Based on data, students analyze local relevance of the use of various resources, and evaluate data and information about the advantages and disadvantages of using fossil fuels and alternative energy sources from a local perspective.</p>		<p>Review key ideas expressed and draw conclusions in light of information gained.</p> <p>Support claims by reason and using evidence.</p>	 
<p>Climate Change</p>	<p>5th Grade 6th Grade</p>	<p>Through role-play, students evaluate the distribution of resources and advantages and disadvantages of utilizing those resources for our needs. By taking various perspectives as stakeholders, students analyze local relevance of the use of various resources, and evaluate data and information about the advantages and disadvantages of using fossil fuels and alternative energy sources.</p>	<p>5.3.1 6.2.1 6.3.3</p>	<p>Engage in a range of collaborative discussions, building on other's ideas.</p> <p>Review key ideas expressed and draw conclusions in light of information gained.</p> <p>Support claims by reason and using evidence.</p>	