Guided Tours
Objectives, Standards & Benchmarks

Guided Tour
Our Guided Tour has three major themes depending on the age of the group. Below are those themes, the primary objectives for each, and the education standards and benchmarks those themes reach.

Pre-K – 2nd grade: Characteristics of Plants and Insects
Guided Tour Objectives
1. Plants and animals progress through lifecycles
2. Characteristics of plants and insects
3. Identify similarities and differences
Iowa Core Curriculum Standards
• Science: Science as Inquiry: Ask questions about objects, organisms, and events in the environment.
• Science: Science as Inquiry: Use evidence to develop reasonable explanations.
• Science: Life Science: Understand and apply knowledge of the characteristics of living things and how living things are both similar to and different from each other and from non-living things.
• Science: Life Science: Understand and apply knowledge of life cycles of plants and animals.
• Science: Life Science: Understand and apply knowledge of the basic needs of plants and animals and how they interact with each other and their physical environment.
• Science: Life Science: Understand and apply knowledge of ways to help take care of the environment.

3rd – 5th grade: Living Organisms in Their Environment
Guided Tour Objectives
1. How the function of a plant or insect part influences its structure.
2. Interrelationships between living things and the environment
3. Organization of simple food chains
Iowa Core Curriculum Standards
• Science: Science as Inquiry: Use evidence to develop reasonable explanations.
• Science: Science as Inquiry: Communicate scientific procedures and explanations.
• Science: Life Science: Understand and apply knowledge of organisms and their environments, including: Structures, characteristics, and adaptations of organisms that allow them to function and survive within their habitats.
• Science: Life Science: Understand and apply knowledge of organisms and their environments, including: How individual organisms are influenced by internal and external factors.
• Science: Life Science: Understand and apply knowledge of organisms and their environments, including: the relationships among living and non-living factors in terrestrial and aquatic ecosystems.
• Science: Life Science: Understand and apply knowledge of environmental stewardship.
6th – 8th grade: Adaptations and Interactions of Plants and Insects with Humans

Guided Tour Objectives
1. Living organisms have many diverse adaptations to survive in their environment
2. Human activity can affect other living things and the environment
3. Understand how technology can solve problems

Iowa Core Curriculum Standards
- Science: Science as Inquiry: Use evidence to develop descriptions, explanations, predictions, and models.
- Science: Life Science: Understand and apply knowledge of interdependency of organisms, changes in environmental conditions, and survival of individuals and species.
- Science: Life Science: Understand and demonstrate knowledge of the social and personal implications of environmental issues.

Pollination Tour
The pollination tour is best for 1st to 3rd grades, but can be modified for older groups. Our Pollination Tour includes a guided tour and a one hour program. The tour will address the objectives, standards and benchmarks above, as well as those listed below.

Guided Tour Objectives
1. Characteristics of a flower
2. Identify the role of the flower and pollination in the flowering plant life cycle, and how the flower and pollination is an essential component of that life cycle
3. Explore the relationships between pollinators and flowering plants

Iowa Core Curriculum Standards K-2
- Science: Science as Inquiry: Ask questions about objects, organisms, and events in the environment.
- Science: Science as Inquiry: Use evidence to develop reasonable explanations.
- Science: Science as Inquiry: Use tools to gather data and extend the senses.
- Science: Science as Inquiry: Use data to construct reasonable explanations.
- Science: Science as Inquiry: Follow appropriate safety procedures when conducting investigations.
- Science: Life Science: Understand and apply knowledge of life cycles of plants and animals.
- Science: Life Science: Understand and apply knowledge of the basic needs of plants and animals and how they interact with each other and their physical environment.

Iowa Core Curriculum Standards 3-5
- Science: Science as Inquiry: Use evidence to develop reasonable explanations.
- Science: Science as Inquiry: Communicate scientific procedures and explanations.
- Science: Science as Inquiry: Identify and generate questions that can be answered through scientific investigations.
- Science: Science as Inquiry: Use appropriate tools and techniques to gather, process, and analyze data.
- Science: Science as Inquiry: Incorporate mathematics in science inquiries.
Science: Life Science: Understand and apply knowledge of organisms and their environments, including: Structures, characteristics, and adaptations of organisms that allow them to function and survive within their habitats.

Science: Life Science: Understand and apply knowledge of organisms and their environments, including: How individual organisms are influenced by internal and external factors.

Science: Life Science: Understand and apply knowledge of organisms and their environments, including: the relationships among living and non-living factors in terrestrial and aquatic ecosystems.

**Seeds Tour**
The seeds tour is best for 1st to 3rd grades, but can be modified for older groups. Our Seeds Tour includes a guided tour and a one hour program. The tour will address the objectives, standards and benchmarks above, as well as those listed below.

**Guided Tour Objectives**
1. Characteristics of a seed
2. Identify the role of the seed in the flowering plant life cycle, and how the seed is an essential component of that life cycle
3. Identify how seeds disperse and why their dispersion is important

**Iowa Core Curriculum Standards K-2**
- Science: Science as Inquiry: Ask questions about objects, organisms, and events in the environment.
- Science: Science as Inquiry: Use evidence to develop reasonable explanations.
- Science: Science as Inquiry: Use tools to gather data and extend the senses.
- Science: Science as Inquiry: Use data to construct reasonable explanations.
- Science: Science as Inquiry: Follow appropriate safety procedures when conducting investigations.
- Science: Life Science: Understand and apply knowledge of life cycles of plants and animals.
- Science: Life Science: Understand and apply knowledge of the basic needs of plants and animals and how they interact with each other and their physical environment.

**Iowa Core Curriculum Standards 3-5**
- Science: Science as Inquiry: Use evidence to develop reasonable explanations.
- Science: Science as Inquiry: Communicate scientific procedures and explanations.
- Science: Science as Inquiry: Identify and generate questions that can be answered through scientific investigations.
- Science: Science as Inquiry: Use appropriate tools and techniques to gather, process, and analyze data.
- Science: Science as Inquiry: Incorporate mathematics in science inquiries.
- Science: Life Science: Understand and apply knowledge of organisms and their environments, including: Structures, characteristics, and adaptations of organisms that allow them to function and survive within their habitats.
- Science: Life Science: Understand and apply knowledge of organisms and their environments, including: How individual organisms are influenced by internal and external factors.
• Science: Life Science: Understand and apply knowledge of organisms and their environments, including: the relationships among living and non-living factors in terrestrial and aquatic ecosystems.