2145 Centre Avenue | Fort Collins, CO 80526 970.416.2486 | fcgov.com/gardens

SCHOOL TOUR DESCRIPTIONS

Sensory Garden Tour:

- 90 minutes
- Recommended for preschool and unique learning groups

Put on your bee and butterfly wings and travel around The Gardens exploring the sights, sounds, textures, smells and colors of the garden. Geared for the younger learner, this program is hands on, fast paced and fun with a focus on observation and exploration. Students will also hear a story, discuss plant needs and plant their very own seed to take home.

Optional: Add the Butterfly House

Customization: This tour provides a great deal of customization of content and focus depending on what you are learning in the classroom or the unique needs of your group.



COLORADO STATE STANDARDS

Preschool

Physical Science:

1:1 Recognize that physical properties of objects and / or materials help us understand the world.

Life Science:

2:1 Recognize that living things have unique characteristics and basic needs that can be observed and studied.

Earth and Space Science:

3:2 The acquisition of concepts and facts related to the natural and physical world and the understanding of naturally occurring relationships.

Number and Quantity:

P.CC.A. Counting and Cardinality: Know number names and the count sequence.

P.CC.B. Counting and Cardinality: Recognize the number of objects in a small set.

Movement Competence and Understanding: 1:1 Travel in a variety of directions using basic locomotor skills and demonstrate understanding of personal and general space.



Plant-astic Scientist Tour:

- Two Hours
- Recommended for kindergarten through third grade

From the smallest seed to the tallest flower, plants feed us, clothe us, heal us and inspire us. How does something so small become so important? Come explore the awe-inspire world of plants as Plant-astic scientists.

Stations:

- What Is a Seed? Students explore the characteristics, parts, functions and adaptations of edible seeds through sorting and dissection activities.
- **How Plants Grow** Students model the life cycle of a plant and discover what they need to grow as they plant a seed to take home
- **How Seeds Move** Students examine and test the inspiring ways seeds move and are dispersed in the garden.
- Feed me! Plant Parts We Eat Younger students explore the different parts of plants we eat and play a fun plant parts harvest relay. Older students (second and third grade) explore the process and importance of photosynthesis through a fun active relay.



COLORADO STATE STANDARDS

Kindergarten

Life Science:

2:1 To live and grow, animals obtain food they need from plants or other animals, and plants need water and light.

Number and Quantity: K.CC.B. Counting and Cardinality: Count to determine the number of objects.

<u>Data Analysis, Statistics and</u> Probability:

K.MD.B. Measurement and Data: Classify objects and count the number of objects in each category.

Movement Competence and Understanding:

1:1 Demonstrate body and spatial awareness through movement.

Social and Emotional Wellness:

3:1 Demonstrate respect for self, others, and equipment.3:2 Demonstrate the ability to follow directions.

First Grade

Life Science:

2:1 All organisms have external parts that they use to perform daily functions.

2:2 Young organisms are very much, but not exactly, like their parents and also resemble other organisms of the same kind.

Social and Emotional Wellness:

3:1 Work independently and with others to complete work.

3:2 Follow the rules of an activity.

Second Grade

Life Science:

2:1 Plants depend on water and light to grow and on animals for pollination or to move their seeds around.

Civics

4:1 Advocate for ideas to improve communities.

Third Grade

Life Science:

2:1 Organisms have unique and diverse life cycles.

2:3 Different organisms vary in how they look and function because they have different inherited information; the environment also affects the traits that an organism develops.

2:5 Sometimes differences in characteristics between individuals of the same species provide advantages in survival and reproduction.

Social and Emotional Wellness:

3:1 Demonstrate positive social behaviors during physical activity.

Wacky and Wonderful World of Plant Tour:

- Two hours
- Recommended for third through fifth grade

Come explore the wacky and wonderful world of plants with us. There are more than 290,000 different species of plants! Plants unique, beautiful, tasty and necessary for life on Earth! Students investigate the needs of plants, create their own terrarium to take home, explore the adaptations that allow plants to live in harsh environments, play the Photosynthesis game and get to know our native Colorado plants.

Stations:

- Earth's Life Support Students explore the chemical process and importance of photosynthesis through a fun active relay.
- **Plants in a Bubble** Students challenge their assumptions and explore what it really takes for plants to grow by creating their own wearable terrarium.
- **Hard Core Plants** Students will explore our Undaunted and Foothills gardens to investigate the internal and external adaptations that allow plants to live in harsh Colorado environments.
- **Colorado Tropics** Students will walk through the sub-tropical gardens of our Butterfly House and compare these humid-loving plants to our native neighbors.

COLORADO STATE STANDARDS

Third Grade

Life Science:

2:3 Different organisms vary in how they look and function because they have different inherited information; the environment also affects the traits that an organism develops.

2:4 Some living organisms resemble organisms that once lived on Earth.

Social and Emotional Wellness: 3:1 Demonstrate positive social behaviors during physical activity.

Geography:

2:2. The concept of region is developed through an examination of similarities and differences in places and communities.

Fourth Grade

Life Science:

2:1 Organisms have both internal and external structures that serve various functions.

Prevention and Risk

Management:

4:1 Demonstrate knowledge of safe practices in a physical activity setting.

Fifth Grade

Physical Science:

1:4 The energy released from food was once energy from the sun.

Life Science:

2:1 Plants acquire their material from growth chiefly from air and water.

2:2 Matter cycles between air and soil and among plants, animals and microbes as these organisms live and die.

Pollinators Among Us Tour:

- Two hours
- Recommended for second through fifth grade

Join us at The Gardens to explore the curious and important world of pollinators! During this program, students put on their community scientist hats and explore the role of pollinators in food production, the process of pollination, our local pollinators and how we can help support pollinators at our homes. Students will plant a pollinator's favorite plant to take home.



Stations:

- What's the Big Deal about Pollinators? Students investigate the interdependence between pollinators and flowers through modeling and flower dissection in our Butterfly House.
- **Pollinators Come in All Shapes and Sizes** Students become community scientists and learn how to look for and identify local pollinators by their unique characteristics and adaptations.
- **Pollinators at Risk** Students become pollinators in this active critical thinking game that challenges them to consider and discuss how humans and nature can positively and negatively affect pollinators.
- **Pollinator Stewards** Students become stewards of their environment by planting a beneficial pollinator plant to take home.

COLORADO STATE STANDARDS

Second Grade

Life Science:

2:1 Plants depend on water and light to grow and on animals for pollination or to move their seeds around.

2:2 A range of different organisms lives in different places.

Math:

2.OA.B. Operations and Algebraic Thinking: Add and subtract within 20.

Geography:

2:2 People in communities manage, modify and depend on their environment.

Civics

4:1 Advocate for ideas to improve communities.

Reading for All Purposes: 2:2 Apply specific skills to comprehend and fluently read informational texts.

Third Grade

Life Science:

2:1 Organisms have unique and diverse life cycles.

2:3 Different organisms vary in how they look and function because they have different inherited information; the environment also affects the traits that an organism develops.

2:5 Sometimes differences in characteristics between individuals of the same species provide advantages in survival and reproduction.

Reading for All Purposes:
2:2 Apply strategies to fluently read and comprehend various

informational texts.

Social and Emotional Wellness: 3:1 Demonstrate positive social behaviors during physical activity.

Fourth Grade

Life Science:

2:1 Organisms have both internal and external structures that serve various functions.

Civics:

4:1 Identify, investigate, and analyze multiple perspectives on civic issues.

Fifth Grade

Life Science:

2:2 Matter cycles between air and soil and among plants, animals and microbes as these organisms live and die.

Social and Emotional Wellness: 3:2 Work cooperatively and productively in a group.

Oral Expression and Listening: 1: 2. Present to express an opinion, persuade or explain / provide information.

Native Plants Tour:

- Two hours
- Recommended for second through fourth grade

Hot summers, cold winters, droughts and floods make Colorado plants particularly resilient due to our rugged environment. Come on a hike though the gardens and meet the native plants in our Foothills Garden, Prairie Garden, alpine Rock Garden and Undaunted Garden landscapes.

Stations:

- **Native Plant Professors** Students are plant professors and teach their peers about some native plants and their cultural uses in our Foothills Garden.
- **Living on the Prairie** Participants explore how nature shapes our prairie ecosystem and use a dichotomous key to identify the diverse and beautiful prairie plants.
- **Undaunted Adaptations** Living in Colorado means you must have some wicked adaptations to survive in our climate. Explore amazing adaptations in our Undaunted Garden and alpine Rock Garden.
- Planting a Tree for Me Students grow a native habitat by planting a tree seed to take home.

COLORADO STATE STANDARDS

Second Grade

Life Science:

- 2:1 Plants depend on water and light to grow and on animals for pollination or to move their seeds around.
- 2:2 A range of different organisms lives in different places.

Geography:

2:2 People in communities manage, modify and depend on their environment.

Oral Expression and Listening:

- 1:1 Engage in dialogue and learn new information through active listening.
- 1:2 Deliver presentations while maintaining focus on topic and be prepared to discuss.

Reading for All Purposes: 2:2 Apply specific skills to comprehend and fluently read informational texts.

Third Grade

Life Science:

- 2:1 Organisms have unique and diverse life cycles.
- 2:3 Different organisms vary in how they look and function because they have different inherited information; the environment also affects the traits that an organism develops.
- 2:5 Sometimes differences in characteristics between individuals of the same species provide advantages in survival and reproduction.

Geography:

2:2 The concept of region is developed through an examination of similarities and differences in places and communities.

Oral Expression and Listening
1:2 Communicate using
appropriate language in informal
and formal situations.

Reading for All Purposes
2: 2. Apply strategies to fluently read and comprehend various informational texts

Fourth Grade

Life Science:

2:1 Organisms have both internal and external structures that serve various functions. There is interaction and interdependence between and among living and nonliving components of systems.

History:

1:1 Analyze primary and secondary sources from multiple points of view to develop an understanding of the history of Colorado.

Oral Expression and Listening:

- 1:1 Pose thoughtful questions after actively listening to others.
- 1:2 Create a plan to effectively present information both informally and formally.

Reading for All Purposes:

- 2:2 Apply strategies to comprehend and interpret informational texts.
- 2:3 Apply knowledge of spelling patterns (orthography) and word meanings (morphology) to decode multisyllable words and determine the meaning of unknown words.

Bountiful Butterflies Tour:

- Two hours
- Recommended for kindergarten through second grade

Butterflies can teach us tremendous lessons. Explore the Gardens on Spring Creek and our Butterfly House to learn all about butterflies, how they grow, what they eat and plant a special butterfly plant to grow at home.

Stations:

- **From Egg to Butterfly** Students embody the process of metamorphous through this imaginative station.
- Butterflies Come in All Shapes and Sizes Students explore the diversity of butterflies learn how to identify native butterflies in our Butterfly House.
- What is the Big Deal about Pollinators? Students investigate the interdependence between pollinators and flowers through modeling and flower dissection.
- **Butterfly Stewards** Students will get to make a difference for local butterflies by planting a butterfly plant to take home.



COLORADO STATE STANDARDS

Kindergarten

Life Science:

2:1 To live and grow, animals obtain food they need from plants or other animals, and plants need water and light.

Earth and Space Science:

3:2 Plants and animals meet their needs in their habitats and impact one another.

Number and Quantity:

K.CC.B. Counting and Cardinality: Count to determine the number of objects.

<u>Data Analysis, Statistics and Probability:</u> K.MD.B. Measurement and Data: Classify objects and count the number of objects in each category.

Movement Competence and Understanding:

1:1 Demonstrate body and spatial awareness through movement.

Social and Emotional Wellness:

- 3:1 Demonstrate respect for self, others and equipment.
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Life Science:

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Social and Emotional Wellness: 3:1 Work independently and with others to complete work.

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Life Science:

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- 2:2 A range of different organisms lives in different places.

Civics

4:1 Advocate for ideas to improve communities.

Taking Flight Tour:

- Two hours
- Recommended for third through fifth grade

Become entomologists for the day and enter the world of lepidoptery, the study of butterflies and moths. During this program, students investigate the inspiring and amazing world of butterflies through hands-on science that applies the real work and data scientists are tackling in the field.

Stations:

- From Egg to Butterfly Students explore the crazy process of metamorphous and visit our chrysalis chamber in the Butterfly House to see the process firsthand.
- Monarch Migration Students map the paths of monarch migration through diverse cultures and practice tagging monarchs like scientists.
- Designed for Success Students experience up close the internal and external adaptations that make butterflies extremely successful pollinators.
- Butterfly Stewards Students review the importance of butterflies for pollination and make a difference for local butterflies by planting a butterfly plant to take home.



COLORADO STATE STANDARDS

Third Grade

Life Science:

2:1 Organisms have unique and diverse life cycles.

2:3 Different organisms vary in how they look and function because they have different inherited information; the environment also affects the traits that an organism develops.

2:5 Sometimes differences in characteristics between individuals of the same species provide advantages in survival and reproduction.

Algebra and Functions

3.OA.A. Operations & Algebraic Thinking: Represent and solve problems involving multiplication and division

Data Analysis, Statistics and Probability 3.MD.A. Measurement and Data: Solve problems involving measurement and estimation of intervals of time.

Fourth Grade

Life Science:

2:1 Organisms have both internal and external structures that serve various functions.

Data Analysis, Statistics and Probability
4.MD.A. Measurement and Data: Solve
problems involving measurement and
conversion of measurements from a larger
unit to a smaller unit.

Geography:

2: 2. Connections are developed within and across human and physical systems.