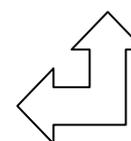
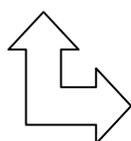
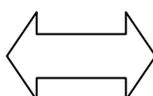


Grade K Science

Unit Title	Animals
Time frame	Marking Period (Ongoing)
21 st Century Themes	<p>Critical Thinking and Problem Solving</p> <p>Communication and Collaboration</p> <p>Flexibility and Adaptability</p> <p>Initiative and Self-Direction</p> <p>Productivity and Accountability</p> <p>Brainstorm to describe and record observations</p>
Interdisciplinary focus and technology integration	<p>Lang. Arts: Use phonics to spell and record butterfly growth in journal.</p> <p>Poem : The Fuzzy Little Caterpillar</p> <p>Art: Illustrate butterfly growth in journal</p> <p>Create symmetrical butterfly with paint and construction paper.</p> <p>Use dot paints and crayons to create caterpillar and habitat in response to the poem "The Fuzzy Little Caterpillar."</p> <p>Math: Count, record, and illustrate caterpillars, chrysalides (chrysalises), and butterflies.</p>

Essential Questions	Big Ideas
<p>What is the life cycle of a butterfly?</p> <p>What are the characteristics of an egg, caterpillar, chrysalis, and butterfly?</p>	<p>The life cycle of a butterfly includes the egg, caterpillar, chrysalis, and butterfly,</p> <p>The egg of a caterpillar is tiny and usually found on the underside of a leaf.</p> <p>The caterpillar of a Painted Lady butterfly is brown in color and increases in size as it eats.</p> <p>The chrysalis of a Painted Lady butterfly is brown, attaches to the side of the container, and shakes as the butterfly develops.</p> <p>The Painted Lady butterfly is brown, black, a white and small. It's wings are moist when it is born.</p>



Learning Targets-students will be able to:

- Name and describe stages of the life cycle of a butterfly.

Assessment

- Formal and Informal Teacher Observations
- Tests / Quizzes
- Diagrams and Models
- Student Projects
- Create butterfly journal by recording and illustrating stages
- Experiment/Investigation

Differentiation

- Hands-On Activities
- Kinesthetic Activities
- Cooperative Learning (Flexible Grouping)
- Create Journal at own level

Content Standards

Life Science

- 5.1.P.A.1 Display curiosity about science objects, materials, and long-term investigations in progress.
- 5.1.P.B.2 Use basic science terms and topic related science tools and technology.
- 5.1.4.B.3 Formulate explanations from evidence.
- 5.3.P.A.1 Investigate and compare the basic physical characteristics of plants, humans, and other animals.
- 5.3.P.B.1 Observe and describe how plants and animals obtain food from their environment, such as by observing the interactions between organisms in a natural habitat.
- 5.3.2.B.1 Describe the requirements for the care of plants and animals related to meeting their energy needs.
- 5.3.P.C.1 Observe and describe how natural habitats provide for the basic needs of plants and animals with respect to shelter, food, water, air, and light.

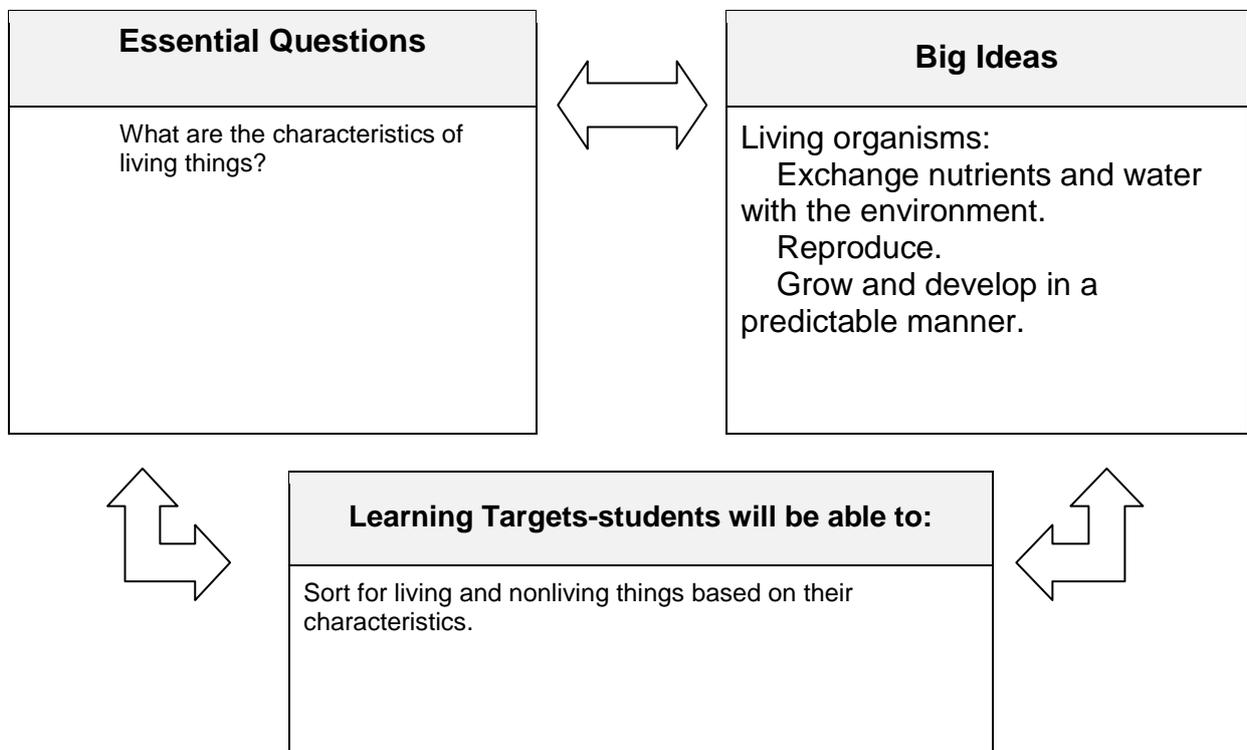
Approaches to Learning

Observation skills, Analyzing skills, Evaluation skills, Scientific Inquiry Skills

Learning Experiences Suggested activities	Teaching Strategies
<p>Use butterfly pavilion to observe and grow caterpillars, chrysalides, and butterflies.</p> <p>Record and illustrate stages of a butterfly in journal.</p> <p>Release and observe butterflies in natural habitat.</p> <p>Read, discuss, and color, FABULOUS FROGS (Life cycle of a frog), reproducible student booklet.</p> <p>Learn and illustrate “The Fuzzy Little Caterpillar “ poem. Highlight known vocab. in poem.</p>	<ul style="list-style-type: none"> •Direct instruction •Differentiated instruction •Interdisciplinary activities •Cooperative learning activities •Reinforcement and remediation
Resources	
<p>Fiction and Nonfiction books</p> <p>Weekly Reader Charts</p> <p>Butterfly Pavilion (Insect Lore: www.insectlore.com 1-800-548-3284)</p> <p>Poetry “The Fuzzy Little Caterpillar”</p> <p>Reproducible Student Booklets</p>	

Grade K Science

Unit Title	Living Nonliving
Time frame	Marking Period (Ongoing)
21 st Century Themes	Critical Thinking and Problem Solving Communication and Collaboration Flexibility and Adaptability Initiative and Self-Direction Productivity and Accountability Brainstorm to describe and record observations
Interdisciplinary focus and technology integration	Art: Illustrate class tree in changing seasons. Color and sort living and nonliving things. Lang. Arts: Cut and glue sentence describing class tree in each season. Math: Sort for living and nonliving things.



Assessment

- Formal and Informal Teacher Observations
- Tests / Quizzes
- Student projects
- Experiment/Investigation

Differentiation

- Hands-On Activities
- Kinesthetic Activities
- Cooperative Learning (Flexible Grouping)
- Illustrate and record observations at own level.

Content Standards

- 5.1.P.A.1 Display curiosity about science objects, materials, activities, and long-term investigations in progress.
- 5.1.P.B.2 Use basic science terms and topic-related science vocabulary.
- 5.1.P.D.1 Represent observations and work through drawing, recording data, and “writing”.
- 5.1.P.B.2 Use basic science terms and topic related science tools and technology.
- 5.1.4.B.3 Formulate explanations from evidence .
- 5.2.2A.1 Sort and describe objects based on the materials of which they are made and their physical properties.
- 5.2.P.E.I Investigate how and why things move.
- 5.3.P.A.2 Observe similarities and differences in the needs of various living and nonliving things.
- 5.3.P.D.1 Observe and record change over time and cycles of change that affect living things.
- 5.3.2.A.1 Group living and nonliving things according to the characteristics that they share.
- 5.3.2.D.I Record the observable characteristics of plants and animals to determine the similarities and differences between parents and their offspring.
- 5.3.2.D.2 Determine the characteristic changes that occur during the life cycle of plants and animals by examining a variety of species, and distinguish between growth and development.

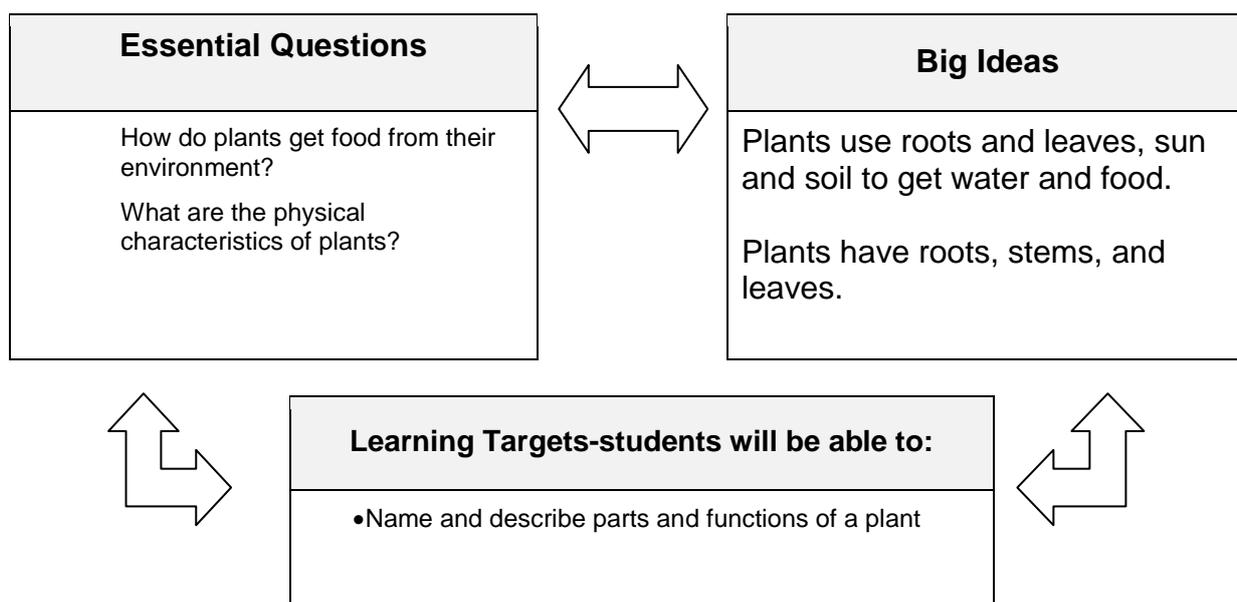
Approaches to Learning

- Scientific Inquiry Skills
- Analyzing Skills
- Evaluation Skills
- Observation Skills

Learning Experiences Suggested activities	Teaching Strategies
<p>Given pictures, color, cut, sort, and glue living or nonliving.</p> <p>Discuss rainforest animals living on the forest floor and in the trees and identify what characteristics of living things they have. Trace name of animal and color.</p> <p>Match mother to baby animal and describe how they change.</p> <p>In September, name a class tree and illustrate the tree during the changing seasons.</p> <p>View and compare baby pictures and/or pictures of children from September with children in June.</p>	<ul style="list-style-type: none"> •Direct Instruction •Differentiated Instruction •Interdisciplinary Activities •Cooperative Learning Activities •Reinforcement and Remediation
Resources	
<p>Fiction and Nonfiction books</p> <p>Weekly Reader</p> <p>Charts</p> <p>Worksheets</p> <p>Class Tree (Large Oak Tree Outside Music Room Works Well)</p> <p>Student Photographs</p>	

Grade K Science

Unit Title	Plants
Time frame	Marking Period (Ongoing)
21 st Century Themes	Critical Thinking and Problem Solving Communication and Collaboration Flexibility and Adaptability Initiative and Self-Direction Productivity and Accountability Brainstorm to Describe and Record Observations Use Inductive and Deductive Reasoning
Interdisciplinary focus and technology integration	Lang. Arts: Use phonics to spell and record amaryllis growth in journal. Art: Illustrate amaryllis growth in journal. Math: Measure and record height of amaryllis with inch ruler.



Assessment
<ul style="list-style-type: none"> •Formal and Informal Teacher Observations •Tests / Quizzes •Diagrams and Models •Student Projects • Create Amaryllis Journal Record and Illustrate Growth. •Experiment/Investigation

Differentiation

- Hands-On Activities
- Kinesthetic Activities
- Cooperative Learning (Flexible Grouping)
- Create Journal at Own Level

Content Standards

Life Science

5.1.P.A.1 Display curiosity about science objects, materials, and long-term investigations in progress.

5.1.P.B.2 Use basic science terms and topic related science tools and technology.

5.1.P.B.3 Identify and use basic tools and technology to extend exploration in conjunction with science investigations.

5.3.P.A.1 Investigate and compare the basic physical characteristics of plants, humans, and other animals.

5.3.P.B.1 Observe and describe how plants and animals obtain food from their environment, such as by observing the interactions between organisms in a natural habitat.

5.3.2.B.1 Describe the requirements for the care of plants and animals related to meeting their energy needs.

5.3.2.B.3 Explain that most plants get water from soil through their roots and gather light through their leaves.

5.3.P.C.1 Observe and describe how a natural habitats provide for the basic needs of plants and animals with respect to shelter, food, water, air, and light.

Approaches to Learning

- Observation Skills
- Analyzing Skills
- Evaluation Skills
- Scientific Inquiry Skills

Learning Experiences

Suggested activities

Plant class amaryllis

Record, illustrate, and measure amaryllis growth in journal

Plant and observe radish seed growth

Plant and observe lima bean growth

Teaching Strategies

- Direct Instruction
- Differentiated Instruction
- Interdisciplinary Activities
- Cooperative Learning Activities
- Reinforcement and Remediation
-

Resources

Fiction and Nonfiction Books

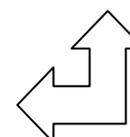
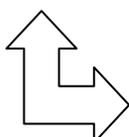
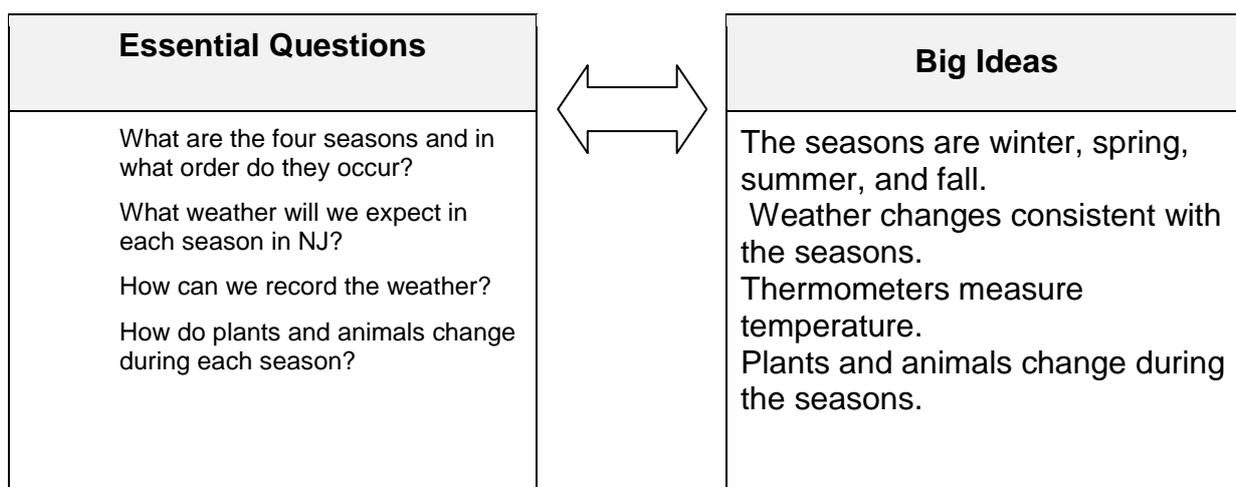
Weekly Reader Charts

Seed and bulb packet directions for amaryllis, radish and lima bean

Reproducible Student Booklets

Grade K Science

Unit Title	Weather
Time frame	Marking Period (Ongoing)
21 st Century Themes	<p>Critical Thinking and Problem Solving</p> <p>Communication and Collaboration</p> <p>Flexibility and Adaptability</p> <p>Initiative and Self-Direction</p> <p>Productivity and Accountability</p> <p>Brainstorm to Describe and Record Observations</p>
Interdisciplinary focus and technology integration	<p>Lang. Arts: Seasonal Poetry</p> <p style="padding-left: 40px;">Use Interactive writing to label season murals.</p> <p>Art: Illustrate daily weather on chart.</p> <p style="padding-left: 40px;">Illustrate fall journal with holidays and activities.</p> <p style="padding-left: 40px;">Create monthly booklet illustrating weather and dress.</p> <p style="padding-left: 40px;">Paint season murals and label with interactive writing.</p> <p>Math: Graph weather monthly.</p> <p style="padding-left: 40px;">Seasonal Activities</p>



Learning Targets-students will be able to;

- Name and describe the four seasons in order.
- Observe and record weather.
- Describe how plants and animals change each season.

Assessment

- Formal and Informal Teacher Observations
- Tests / Quizzes
- Diagrams and Models
- Student Projects
- Create butterfly journal by recording and illustrating stages
- Experiment/Investigation

Differentiation

- Hands-On Activities
- Kinesthetic Activities
- Cooperative Learning (Flexible Grouping)
- Create Journal at Own level

Content Standards

Life Science

- 5.1.P.A.1 Display curiosity about science objects, materials, and long-term investigations in progress.
- 5.1.P.B.2 Use basic science terms and topic related science tools and technology.
- 5.1.4.B.3 Formulate explanations from evidence.
- 5.4.2.F.1 Observe and document daily weather conditions and discuss how the weather influences your activities for the day.
- 5.4.P.F.1 Observe and record weather.

Approaches to Learning

- Observation Skills
- Analyzing Skills
- Evaluation Skills
- Scientific Inquiry Skills
- Integrating and Summarizing Skills

Learning Experiences

Suggested activities

Record weather daily on weather chart.

Learn Poem: "Winter Spring Summer Fall" and cut, color, and order pictures of 4 seasons.

Illustrate class tree during the four seasons.

Measure, record, and predict temperature for a week.

Create apple tree book depicting the apple tree in each season.

Seasonal Scenery: Match seasonal scenery with appropriate dress.

Ready for Winter: Discuss and create booklet of animals and how they cope with winter.

Paint season murals and label with interactive writing.

Homework: Fall Collection Project
(Collect leaves, seeds, nuts, cones, and pods to identify and sort.)

Teaching Strategies

- Direct Instruction
- Differentiated Instruction
- Interdisciplinary Activities
- Cooperative Learning Activities
- Reinforcement and Remediation

Resources

Fiction and Nonfiction Books
Weekly Reader
Charts
Thermometers
Reproducible Student Booklets

