Unit 4 introduces the children to Earth’s four seasons, the various types of weather that comes with each of them, and the reason we experience day and night. They will also learn about the night sky and constellations, and discover how to tell the difference between planets and stars. In addition, the children will explore:

- LI /l/; Rr /r/; Cc /k/
- Graphing
- Compound words
- Blending letters to form words
- Cause and effect
- Numbers
- Coins
- Clouds and how they are formed
- Hibernation
- The Solar System
- Measurement
- Three-dimensional geometric shapes

**Overviews by Week:**

Week 11: Observing Weather ......................... 2-4
Week 12: The Four Seasons ............................. 5-7
Week 13: Outer Space ................................. 8-10
Unit 4 • Week 11: Observing the Weather

This week you will introduce the children to various types of weather, experiment with predicting what the wind will and won’t blow, and conduct an experiment to create a cloud.

The children will also:

• Learn /l/ and identify initial and final /l/ words
• Create “Who Likes the Rain?” and “Will the Wind Blow it?” graphs and interpret the results
• Segment and blend words together to form compounds
• Review letter and sounds for Aa, Bb, Nn, Pp, Ss, and Tt
• Blend letters to form words
• Discover how clouds are formed
• Write observations of a cloud experiment
• Learn about different types of thermometers and how they work

Essential Questions

• How do thermometers help us?
• How does knowing sounds and putting them together help us read?
• Why are clouds important?
• How do graphs help us?

Standards & Benchmarks

Reading

• Interacts appropriately with books and other materials in a print rich environment
• Engages in group reading activities with purpose and understanding
• Describes the relationship between illustrations and text
• Identifies sequence of events
• Recognizes cause and effect
• Identifies roles of author/illustrator
• Makes connections using illustrations/photos, prior knowledge, real-life experiences
• Makes predictions based on titles, illustrations, content and prior knowledge
• Recalls important facts from informational text
• Differentiates between fiction and nonfiction
• Recalls information from stories

Phonics & Word Recognition

• Associates letters with their names and sounds
• Identifies words beginning with the same letter as their own name
• Demonstrates understanding of one-to-one correspondence of letter and sounds

Print Concepts

• Connects oral language and print
• Understands that letters form words
• Understands words in print are separated by spaces
• Recognizes spoken words are represented in written language by specific sequences of letters
• Shows where print begins on the page
• Focuses on letter names and shapes
• Recognizes relationship between illustrations and text
• Differentiates letters and numbers
English Conventions

- Understands and uses question words
- Recognizes first letter of names is capitalized

Phonological Awareness

- Identifies rhyming words
- Recognizes and identifies beginning sounds in words
- Recognizes and identifies beginning and ending sounds
- Combines words to form compound words
- Isolates and pronounces the initial sounds in words
- Distinguishes individual words within spoken phrases or sentences
- Blends phonemes

Vocabulary

- Uses illustrations and context to determine meanings of unknown words
- Uses words and phrases acquired through conversations, activities and read alouds
- Identifies new meanings for familiar words and applies them accurately
- Understands and uses describing words

Speaking & Listening

- Speaks in complete sentences
- Demonstrates knowledge of nonverbal conversational rules
- Engages in agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion)
- Asks questions in order to seek help, get information or clarify something that is not understood

Writing

- Uses drawing, dictation, scribble writing, or invented spelling to convey meaning
- Recognizes writing as a way of communicating for a variety of purposes, such as, giving information, sharing stories, or giving an opinion
- Explores letter sound relationships while writing
- Contributes to a shared writing experience or topic of interest

Mathematics

Number Sense

- Uses one-to-one correspondence to determine “how many”
- Counts and compares groups of objects (more, fewer, less and/or same)

Patterns, Operations, and Algebraic Thinking

- Creates, identifies, duplicates, and extends simple patterns

Geometry and Spatial Sense

- Responds to and uses positional words (e.g., in, under, between, down, behind)

Measurement and Data

- Uses charts and graphs to collect and analyze data
- Uses terms related to time periods such as morning, afternoon, night, today, tomorrow, and yesterday
- Becomes familiar with standard measuring tools and their uses

Science

Scientific Inquiry and Reasoning

- Shows curiosity by asking questions and seeking information
- Participates in scientific investigations, analyzes, draws conclusions, and communicates results
- Makes and verifies predictions
- Uses tools and equipment to explore objects
- Collects, describes and records information

Physical Science

- Observes and describes how objects move
- Investigates states of matter
- Develops awareness of the properties of objects

Life Science

- Demonstrates characteristics in the appearance, behavior, and habitats of animals

Earth and Space

- Investigates properties of earth materials including water, soil, rocks, and sand
- Explores the characteristics of clouds
- Observes and describes the weather and how it changes
- Understands the use of natural resources and demonstrates environmental awareness and responsibility (e.g., reduce, reuse, recycle)
Social Studies

Self, Family and Community
- Recognizes common symbols in the community
- Recognizes the roles and responsibilities of various workers in their community

Geography and Cultural Differences
- Understands maps are representations of actual places
- Recognizes aspects of the environment, such as roads, buildings, trees, gardens, bodies of water, or land formations

Government
- Recognizes patriotic symbols and activities

History
- Differentiates past, present, and future
- Describes events that happened in the past

Technology

Technology Use
- Uses technology independently to explore concepts and gain information
- Uses technology for research with teacher’s support

Approaches to Learning

Initiative and Curiosity
- Develops increasing independence and willingness to try new challenges
- Demonstrates increased flexibility, imagination, and inventiveness in approaching tasks and activities

Creativity
- Approaches tasks, activities and problems with creativity

Reflection and Problem Solving
- Reflects on what has been learned
- Uses self-talk as a strategy
- Uses prior knowledge to understand new experiences or problems in new contexts

Social/Emotional Development

Self-Regulation
- Uses materials appropriately and puts them away

Relationships
- Demonstrates sense of belonging to groups
- Seeks assistance from adults and classmates
- Engages in and maintains positive relationships and interactions with trusted adults and children

Social Problem Solving
- Works with others to solve problems

Emotional Development
- Demonstrates understanding and acceptance of similarities and differences in others
- Recognizes self as unique having own abilities, characteristics, emotions, and interests

Creative Arts

Art
- Creates original artwork
- Experiments with a variety of art materials
- Shows care and persistence in a variety of art projects

Creative Movement and Dance
- Expresses concepts, ideas or feelings through movement

Dramatic Play
- Engages in cooperative pretend play with other children
- Represents fantasy and real-life experiences through pretend play

Health, Safety, and Nutrition

Self-Care
- Demonstrates personal hygiene and emerging self-care skills

Health and Nutrition
- Develops awareness of nutritious food choices and habits that promote physical well being
This week you will demonstrate why we have day and night and the four seasons on Earth, and why we can’t see the sun at night. The children will examine the different seasons on Earth and the changes in the weather they bring.

The children will also:
- Learn /r/ and identify initial and final /r/ words
- Discover some of the sun’s effects on Earth
- Realize that day and night and the four seasons are patterns
- Graph their favorite seasons
- Participate in a “Pajama Fashion Show”
- Consider how animals deal with the changes in weather winter brings
- Blend syllables to form words

**Essential Questions**

- What if there was only daylight?
- What would happen if there was no sun?
- If you were an animal where would you go in winter? Why?

**Standards & Benchmarks**

**Reading**
- Engages in group reading activities with purpose and understanding
- Asks and answers questions about key elements and details in a text
- Identifies roles of author/illustrator
- Makes connections using illustrations/photos, prior knowledge, real-life experiences
- Recalls information from stories
- Asks and answers questions
- Uses illustrations to make inferences

**Print Concepts**
- Connects oral language and print
- Understands directionality in print
- Understands that letters form words
- Understands print conveys meaning
- Recognizes spoken words are represented in written language by specific sequences of letters
- Identifies front cover, back cover, and title of a book
- Focuses on letter names and shapes
- Recognizes relationship between illustrations and text

**Phonics & Word Recognition**
- Associates letters with their names and sounds
- Identifies words beginning with the same letter as their own name
- Demonstrates understanding of one-to-one correspondence of letter and sounds

**Alphabet Knowledge**
- Recites alphabet in sequence
- Recognizes and names most letters of the alphabet, especially those in their own name
Phonological Awareness
- Counts and blends syllables into spoken words
- Identifies rhyming words
- Recognizes and identifies beginning sounds in words
- Recognizes and identifies beginning and ending sounds
- Combines words to form compound words
- Isolates and pronounces the initial sounds in words
- Distinguishes individual words within spoken phrases or sentences

Vocabulary
- Comprehends increasingly complex and varied vocabulary
- Connects words and their meanings
- Identifies real-life connections between words and their use
- Discusses words and their meanings
- Uses words and phrases acquired through conversations, activities and read alouds
- Understands and uses describing words

Speaking & Listening
- Speaks in complete sentences
- Describes familiar objects according to characteristics or attributes
- Follows simple and multiple-step directions
- Participates in group discussions
- Listens to and discusses literary texts
- Participates in collaborative conversations with diverse partners about pre-k topics and texts

Writing
- Uses drawing, dictation, scribble writing, or invented spelling to convey meaning
- Recognizes writing as a way of communicating for a variety of purposes, such as, giving information, sharing stories, or giving an opinion
- Uses appropriate writing conventions with adult assistance
- Contributes to a shared writing experience or topic of interest

Mathematics

Number Sense
- Uses one-to-one correspondence to determine “how many”
- Counts in sequence
- Identifies the number that comes before or after a given number in a counting sequence
- Recognizes and names numerals
- Represents numbers in different ways
- Understands numbers always represent the same quantity

Patterns, Operations, and Algebraic Thinking
- Combines and separates sets of objects to create new sets
- Creates, identifies, duplicates, and extends simple patterns
- Understands addition as adding to, and subtraction as taking away from

Geometry and Spatial Sense
- Understands directionality, order, and position of self and objects in space

Measurement and Data
- Uses charts and graphs to collect and analyze data
- Uses terms related to time periods such as morning, afternoon, night, today, tomorrow, and yesterday
- Becomes familiar with standard and nonstandard measuring tools and their uses
- Measures length, weight, height, size, or capacity of one or more objects

Science

Scientific Inquiry and Reasoning
- Participates in scientific investigations, analyzes, draws conclusions, and communicates results
- Collects, describes and records information
- Makes and verifies predictions

Life Science
- Describes characteristics in the appearance and behavior and habitats of animals
- Notices similarities and differences among various living things
- Notices changes in living things over time

Physical Science
- Investigates states of matter
- Explores relationship of objects to light

Earth and Space
- Explores the characteristics of the sun, moon, stars, and/or clouds
- Observes and describes the weather and how it changes

Engineering
- Designs, builds, analyzes, and modifies structures
Social Studies

**Government**
- Recognizes patriotic symbols and activities

**History**
- Describes events that happened in the past

Technology

**Technology Use**
- Uses technology independently to explore concepts and gain information
- Enjoys electronic forms of storybooks and informational texts

Approaches to Learning

**Engagement and Persistence**
- Focuses attention on tasks and experiences, despite interruptions or distractions
- Brings a teacher-directed or self-initiated task, activity, or project to completion

**Creativity**
- Uses imagination in play and interactions with others

**Reflection and Problem Solving**
- Develops increasing ability to find multiple solutions to a question, task, or problem alone or with others
- Uses self-talk as a strategy

Creative Arts

**Art**
- Creates original artwork
- Describes or explains own artwork
- Shows care and persistence in a variety of art projects

**Creative Movement and Dance**
- Expresses concepts, ideas or feelings through movement
- Experiences different moods, tempos, and rhythms in music activities

**Dramatic Play**
- Represents real-life experiences through pretend play
- Engages in cooperative pretend play with other children

Physical Development

**Fine Motor Skills**
- Demonstrates control, strength, and dexterity to manipulate objects
- Uses writing and drawing tools
- Demonstrates hand-eye coordination

**Gross Motor Skills**
- Moves with an awareness of personal space in relationship to objects and others
- Demonstrates strength and coordination of large muscles to engage in skills such as jumping, hopping and running
- Moves with balance and control
- Combines a sequence of large motor skills

Social/Emotional Development

**Relationships**
- Engages in and maintains positive relationships and interactions with trusted adults and children

**Social Problem Solving**
- Uses basic problem solving skills to resolve conflicts peacefully
- Works with others to solve problems
- Accepts guidance and direction and seeks support when needed

**Emotional Development**
- Demonstrates understanding and acceptance of similarities and differences in others
This week you will teach the children about the night sky. They will discover that there are billions of planets and stars, like our sun, and they will learn how to tell the difference when they view the night sky.

The children will also:
- Learn the letter Cc and /k/ and identify initial and final /k/ words
- Listen to a nonfiction selection about an astronaut
- Create nighttime chalk drawings
- Discover the Big Dipper constellation
- Learn interesting facts about our planet
- Learn about the International Space Station
- Use connect cubes as measuring tools
- Blend and clap syllables
- Illustrate and dictate sentences about outer space

**Essential Questions**

- How does the moon help us?
- What would it be like to live on another planet?
- Why is it important to know how to measure something?
- How do reading nonfiction books help us learn?
- Where in the classroom do you see cubes? Cones? Pyramids? Cylinders?
- What would it be like to be an astronaut?

**Standards & Benchmarks**

**Reading**
- Engages in group reading activities with purpose and understanding
- Makes connections using illustrations/photos, prior knowledge, real-life experiences
- Recognizes common types of literature
- Identifies characters in a story
- Recalls important facts from informational text
- Differentiates between fiction and nonfiction
- Recalls information from stories

**Phonics & Word Recognition**
- Associates letters with their names and sounds

**Print Concepts**
- Connects oral language and print
- Understands words in print are separated by spaces
- Recognizes spoken words are represented in written language by specific sequences of letters
- Focuses on letter names and shapes
- Recognizes relationship between illustrations and text
**Alphabet Knowledge**
- Recites alphabet in sequence

**Phonological Awareness**
- Counts and blends syllables into spoken words
- Identifies rhyming words
- Recognizes and identifies beginning sounds in words
- Recognizes and identifies beginning sounds in words or topic of interest
- Recognizes and identifies beginning and ending sounds
- Combines words to form compound words
- Distinguishes individual words within spoken phrases or sentences

**Vocabulary**
- Comprehends increasingly complex and varied vocabulary
- Asks questions about unknown objects and words
- Identifies real-life connections between words and their use
- Uses words and phrases acquired through conversations, activities and read alouds

**Speaking & Listening**
- Follows simple and multiple-step directions
- Participates in group discussions
- Participates in collaborative conversations with diverse partners about pre-k topics and texts
- Asks and answers questions in order to seek help, get information or clarify something that is not understood

**Writing**
- Uses drawing, dictation, scribble writing, or invented spelling to convey meaning
- Explores letter sound relationships while writing
- Contributes to a shared writing experience or topic of interest

**Mathematics**

**Number Sense**
- Uses one-to-one correspondence to determine “how many”
- Recognizes number of objects stays the same regardless of their arrangement
- Counts in sequence
- Identifies the number that comes before or after a given number in a counting

**Patterns, Operations, and Algebraic Thinking**
- Sorts objects by physical attributes
- Uses concrete objects to solve problems
- Combines and separates sets of objects to create new sets
- Creates, identifies, duplicates, and extends simple patterns

**Geometry and Spatial Sense**
- Recognizes and identifies basic two-dimensional shapes
- Recognizes and identifies basic three-dimensional shapes

**Science**

**Scientific Inquiry and Reasoning**
- Shows curiosity by asking questions and seeking information
- Uses senses to explore
- Makes and verifies predictions

**Physical Science**
- Investigates states of matter
- Explores relationship of objects to light
- Develops awareness of the properties of objects

**Earth and Space**
- Investigates properties of earth materials including water, soil, rocks, and sand
- Explores the characteristics of the sun, moon, stars, and/or clouds
- Observes and describes the weather and how it changes

**Engineering**
- Designs, builds, analyzes, and modifies structures using blocks or other classroom materials
Social Studies

Self, Family and Community
- Demonstrates knowledge of personal information (hair color, age, gender, phone, address etc.)
- Recognizes and accepts responsibility

Government
- Recognizes patriotic symbols and activities

Geography and Cultural Differences
- Understands maps are representations of actual places
- Recognizes aspects of the environment, such as roads, buildings, trees, gardens, bodies of water, or land formations

History
- Understands how people live and what they do changes over time

Economics
- Recognizes the difference between wants and needs

Technology Use

Technology Use
- Moves cursor to a target on screen
- Understands how to open or close windows and use the “back” button
- Becomes familiar with interactive applications, games or activities
- Uses technology for research with teacher’s support

Approaches to Learning

Initiative and Curiosity
- Shows curiosity and initiative by choosing to explore a variety of activities and discuss a range of topics, ideas, and tasks
- Demonstrates increasing independence and willingness to try new challenges

Engagement and Persistence
- Brings a teacher-directed or self-initiated task, activity, or project to completion

Creativity
- Uses imagination in play and interactions with others

Reflection and Problem Solving
- Develops increasing ability to find multiple solutions to a question, task, or problem alone or with others
- Reflects on what has been learned
- Uses self-talk as a strategy

Creative Arts

Art
- Creates original artwork
- Shows care and persistence in a variety of art projects
- Shows appreciation for the creative work of others

Music
- Creates sound using traditional or handmade instruments

Creative Movement and Dance
- Expresses concepts, ideas or feelings through movement
- Responds to changes in tempo and a variety of musical rhythms through body movement

Dramatic Play
- Engages in spontaneous and imaginative play using a variety of materials to dramatize stories and real life experiences
- Represents real-life experiences through pretend play
- Participates in teacher-guided dramatic play activities

Health, Safety, and Nutrition

Health and Nutrition
- Develops awareness of nutritious food choices and habits that promote physical well being

Safety
- Identifies importance of safety practices and rules

Physical Development

Fine Motor Skills
- Demonstrates control, strength, and dexterity to manipulate objects
- Demonstrates hand-eye coordination
- Uses writing and drawing tools

Gross Motor Skills
- Combines a sequence of large motor skills
- Demonstrates strength and coordination of large muscles to engage in skills such as jumping, hopping and running
- Moves with an awareness of personal space in relationship to objects and others

Social/Emotional Development

Self-Regulation
- Recognizes and regulates emotions, attention, impulses and behavior
- Demonstrates self-help skills

Social Problem Solving
- Works with others to solve problems

Emotional Development
- Demonstrates understanding and acceptance of similarities and differences in others