

SUGGESTED PACING

SCIENCE INQUIRY AND APPLICATION

Content Statements: During the years of PreK-4, all students must become proficient in the use of the following scientific processes, with appropriate laboratory safety techniques, to construct their knowledge and understanding in all science content areas:

- Observe and ask questions about the natural environment
- Plan and conduct simple investigations
- Employ simple equipment and tools to gather data and extend the senses
- Use appropriate mathematics with data to construct reasonable explanations
- Communicate about observations, investigations and explanations
- Review and ask questions about the observations and explanations of others

STRAND: EARTH AND SPACE SCIENCE (ESS)

Topic: Daily and Seasonal Changes

This topic focuses on observing, exploring, describing and comparing weather changes, patterns in the sky and changing seasons.

Content Statements: Weather Changes are both long and short term.

- Weather Changes occur throughout the day and from day to day.
- Air is a non-living substance that surrounds Earth and wind is moving air
- Wind, temperature and precipitation can be used to document observable weather changes.
- Yearly weather changes (seasons) are observable patterns in daily weather changes

PRINT RESOURCES

ScienceFusion

- Unit 1, TE pages, 1-32
- Unit 7, TE pages, 212-239; SE pages 81-96
- Unit 7, Big Book of Science Vocabulary (pages 20-22)
- Unit 7, Big Book of Science Songs and Rhymes (pages 14, 16)
 - Science Songs CD, Track 10, Track 12
- Unit 7, Picture Sorting Cards 5, 39-42, 55-58
- Unit 7, Science and Engineering Leveled Readers
 - On-Level/Below Level - *How Can We Describe Weather and Seasons*
 - Above Level - *Sun, Storm, Sun Again*

DIGITAL RESOURCES

ScienceFusion

- Unit 1, Digital Lessons
- Unit 7, Lesson 20 Digital Lesson
- Unit 7, Lesson 21 Digital Lesson
- Unit 7, Lesson 22 Digital Lesson
- Unit 7, Virtual Lab "What Can We Observe About Weather?"

SCIENCE AND ACADEMIC VOCABULARY

Unit 1: Balance, Compare, Hand Lens, Hear, Measure, Measuring Cup, Observe, Ruler, See, Smell, Sort, Taste, Thermometer, Touch
Unit 7: Cloudy, Fall, Rainy, Snowy, Spring, Summer, Sunny, Thermometer, Weather, Windsock, Windy, Winter

DIFFERENTIATION

Basic (Extra Support)

- Unit 7 TE pages 220; 228; 238

Advanced (Enrichment)

- Unit 7 TE pages 220; 228; 238
- Unit 7 Trade Book Reading - TE page 211

FIELD EXPERIENCE CONNECTIONS

Fall Months only: Nature Center at Shaker Lakes' ASK (Applied Science for Kids): Nature Alive

Program Details: Standards-based programming guides students through the use of analysis and observation to determine what makes something alive. To prepare in advance In advance, plan to attend the professional development session to receive the activity kit (hands on activities and experiments) and receive the pre- and post-visit activities.

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INQUIRY SKILLS	
<ul style="list-style-type: none"> • Compare • Design a Way to Solve a Problem 	<ul style="list-style-type: none"> • Infer • Measure • Observe • Sequence
HANDS-ON INQUIRY AND APPLICATION	
<ul style="list-style-type: none"> • "Observe the Weather" (Flipchart page 14, TE pages 208; 219) 	<ul style="list-style-type: none"> • "Measure Temperature" (Flipchart page 15, TE pages 208; 227) • "How Can We Keep Things Warm" (TE pages 208; 237)
ASSESSMENTS/PROGRESS MONITORING	ASSESSMENT GUIDE
<ul style="list-style-type: none"> • Sum it Up <ul style="list-style-type: none"> ○ Lesson 20 - SE page 86, TE page 218 ○ Lesson 21 - SE page 90, TE page 226 ○ Lesson 22 - SE page 96, TE page 236 • Unit 7 Wrap-Up - TE page 240 • Unit 7 Performance Assessment - TE page 240 	
ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: ELA	
<p>Journeys</p> <ul style="list-style-type: none"> • Make Connections - TE pages 220-221 <ul style="list-style-type: none"> ○ Drama - Act out Kinds of Weather ○ Language Arts - Tell a Weather Story ○ Writing - Write a Descriptive Poem • Make Connections - TE pages 228-229 <ul style="list-style-type: none"> ○ Writing - Write a Hot and Cold Poem • Make Connections - TE pages 238-239 <ul style="list-style-type: none"> ○ Drama - Act Out the Seasons ○ Language Arts - Describe Seasonal Changes 	<p>Journeys Connections:</p> <ul style="list-style-type: none"> • Lesson 12, Whole Group - Big Book - <i>Snow</i> (T130) • Lesson 12, Small Group - Vocabulary Reader - <i>Animals in the Snow</i> (T174) • Lesson 12, Small Group - On Level Reader - <i>Bears Through the Winter</i> - (T181) • Lesson 12, Small Group - Advanced Reader - <i>No Snow!</i> (T182) • Lesson 25, Whole Group - Big Book - <i>Pie in the Sky</i> (T412)
ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: MATH	
<p>Math Expressions</p> <ul style="list-style-type: none"> • Make Connections - TE pages 228 <ul style="list-style-type: none"> ○ Math - Make a Graph • Make Connections - TE pages 238 <ul style="list-style-type: none"> ○ Math - Make a Picture Graph 	