

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: Earth's Resources

This topic focuses on Earth's resources. While resources can be living and nonliving, within this strand, the emphasis is on Earth's nonliving resources, such as water, air, rock, soil and the energy resources they represent.

Content Statements:

- Earth's nonliving resources have specific properties.
- Soil is composed of pieces of rock, organic material, water and air and has characteristics that can be measured and observed.
- Rocks have unique characteristics that allow them to be sorted and classified.
- Rocks form in different ways. Air and water are nonliving resources.

PRINT RESOURCES

ScienceFusion

- Unit 1, TE pages 1A-1M; 1-52
- Unit 3, Lessons 3-4
- Unit 3, TE pages 109A-134A
- Unit 3, Inquiry Flip Chart pages 20-21

DIGITAL RESOURCES

ScienceFusion

- Unit 1, Digital Lessons
- Unit 3, Lesson 3 Digital Lesson
- Unit 3, Lesson 4 Digital Lesson

SCIENCE AND ACADEMIC VOCABULARY

Unit 1: Bar Graph, Chart, Data Table, Data, Empirical Evidence, Experiment, Graduated Cylinder, Hypothesis, Infer, Investigation, Map, Microscope, Model, Observe, Predict, Temperature, Variable

Unit 3: Clay, Humus, Mineral, Nutrients, Rock, Sand, Silt, Soil

DIFFERENTIATION

Basic (Extra Support)

- Unit 3 Response to Intervention - TE page 89K
- Unit 3 TE pages 115, 116, 122, 125, 127

Advanced (Enrichment)

- Unit 3 TE pages 115, 116, 122, 125, 127

English Language Learners

- Unit 3 TE pages 89L-89M, 112, 113, 124, 128, 131

FIELD EXPERIENCE CONNECTIONS

Greater Cleveland Aquarium's N.E.M.O: Nurturing the Environment by Maintaining Ohio Program.

Program details: Aquatic animal adaptation investigation. Use STEM design to build a model fish to live in a specific habitat, Predict how environmental changes may affect fish. To prepare in advance-attend two professional development sessions to receive Classroom Aquarium and a flash drive with year-long curriculum connections.

For information contact: Ray Patacca & Erin Bauer 216-862-8803 x7703 or education@greaterclevelandaquarium.com

INQUIRY SKILLS

- | | |
|--|--|
| <ul style="list-style-type: none"> • Compare • Draw Conclusions • Formulate or Use Models • Gather, Record, Display, or Interpret Data | <ul style="list-style-type: none"> • Infer • Observe • Plan and Conduct a Simple Investigation • Predict |
|--|--|

HANDS-ON INQUIRY AND APPLICATION

- | | |
|---|---|
| <ul style="list-style-type: none"> • "Making Rocks" (Flipchart page 20, TE pages 89G, 109A) • "Test-A-Rock" (Flipchart page 20, TE 89G, 109A) | <ul style="list-style-type: none"> • "Forming Soil" (Flipchart page 21, TE page 89H, 121A) • "Compost It!" (Flipchart page 21, TE page 89H, 121A) |
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ASSESSMENTS/PROGRESS MONITORING	ASSESSMENT GUIDE		
<ul style="list-style-type: none"> • Sum it Up <ul style="list-style-type: none"> ○ Unit 3, Lesson 3 - SE page 118, TE page 118 ○ Unit 3, Lesson 4 - SE page 132, TE page 132 • Brain Check and Apply Concepts <ul style="list-style-type: none"> ○ Unit 3, Lesson 3 - SE pages 119-120, TE pages 119-120 ○ Unit 3, Lesson 3 - SE pages 133-134, TE pages 133-134 	<ul style="list-style-type: none"> • Lesson Quiz <ul style="list-style-type: none"> ○ Unit 3, Lesson 3 - page AG 27 ○ Unit 3, Lesson 4 - page AG 28 		
ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: ELA			
<p>Journeys</p> <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top; width: 50%;"> <ul style="list-style-type: none"> • Writing Connection - TE page 117 • Make Connections - TE page 120A <ul style="list-style-type: none"> ○ Language Arts Connection - Rock Collecting (Average) • Writing Connection - TE page 123 • Writing Connection - TE page 126 </td> <td style="vertical-align: top; width: 50%;"> <ul style="list-style-type: none"> • Writing Connection - TE page 129 • Make Connections - TE page 134A <ul style="list-style-type: none"> ○ Writing Connection - Picture Dictionary (Easy) ○ Writing Connection - A Worm's Tale (Average) • Writing Connection - TE page 138 </td> </tr> </table>		<ul style="list-style-type: none"> • Writing Connection - TE page 117 • Make Connections - TE page 120A <ul style="list-style-type: none"> ○ Language Arts Connection - Rock Collecting (Average) • Writing Connection - TE page 123 • Writing Connection - TE page 126 	<ul style="list-style-type: none"> • Writing Connection - TE page 129 • Make Connections - TE page 134A <ul style="list-style-type: none"> ○ Writing Connection - Picture Dictionary (Easy) ○ Writing Connection - A Worm's Tale (Average) • Writing Connection - TE page 138
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ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: MATH			
<p>Math Expressions</p> <ul style="list-style-type: none"> • Math Connection - TE page 111 • Math Expressions Connections: <ul style="list-style-type: none"> ○ Unit 1 Lesson 2: Multiplication as Equal Groups MX TE pages 13-15 ○ Unit 1 Lesson 6: Building Fluency with 2s and 5s MX TE page 60 ○ Unit 1 Lesson 9: Building Fluency with 2s, 5s, 9s, and 10s MX TE page 85 ○ Unit 1 Lesson 14: Building Fluency with 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 85-86 ○ Unit 1 Lesson 16: Solve and Create Word Problems MX TE pages 147-148 ○ Unit 1 Lesson 18: Building Fluency with 0s, 1s, 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 159-160 ○ Unit 2 Lesson 4: Write Word Problems and Equations MX TE pages 204-208 ○ Unit 2 Lesson 7: Practice with 6s, 7s, and 8s MX TE page 230 ○ Unit 3 Lesson 10: Solve Word Problems Involving Time MX TE pages 367-368 ○ Unit 3 Lesson 14: Use Graphs to Solve Time and Measurement Word Problems MX TE pages 396-398 ○ Unit 4 Lesson 3: Place Value in Word Problems MX TE pages 432-434 ○ Unit 4 Lesson 4: Practice with Place Value MX TE page 439 ○ Unit 4 Lesson 8: Discuss Addition Methods MX TE page 468 ○ Unit 4 Lesson 9: The Grouping Concept in Addition MX TE page 478 ○ Unit 4 Lesson 17: Solve Word Problems MX TE pages 538-542 ○ Unit 5 Lesson 1: Addition and Subtraction Situations MX TE pages 556-561 ○ Unit 5 Lesson 2: Word Problems with Unknown Addends or Unknown Factors MX TE pages 568-572 ○ Unit 5 Lesson 3: Word Problems with Unknown Starts MX TE pages 576-580 ○ Unit 5 Lesson 4: Comparison Problems MX TE pages 587-594 ○ Unit 5 Lesson 5: Comparison Problems with Misleading Language MX TE pages 598-600 ○ Unit 5 Lesson 6: Word Problems with Extra, Hidden, and Not Enough Information MX TE pages 604-608 • Math Connection - TE page 130 • Math Expressions Connections: <ul style="list-style-type: none"> ○ Unit 3 Lesson 11: Read and Create Pictographs and Bar Graphs MX TE pages 374-378 ○ Unit 3 Lesson 12: Read and Create Bar Graphs with Multidigit Numbers MX TE pages 382-386 ○ Unit 3 Lesson 14: Use Graphs to Solve Time and Measurement Word Problems MX TE pages 396-398 ○ Unit 5 Lesson 1: Addition and Subtraction Situations MX TE pages 556-561 ○ Unit 5 Lesson 2: Word Problems with Unknown Addends or Unknown Factors MX TE pages 568-572 ○ Unit 5 Lesson 3: Word Problems with Unknown Starts MX TE pages 576-580 			

SUGGESTED PACING	
<p>STRAND: EARTH AND SPACE SCIENCE (ESS) Topic: Earth's Resources This topic focuses on Earth's resources. While resources can be living and nonliving, within this strand, the emphasis is on Earth's nonliving resources, such as water, air, rock, soil and the energy resources they represent. Content Statements:</p> <ul style="list-style-type: none"> • Earth's resources can be used for energy. • Many of Earth's resources can be used for the energy they contain. • Renewable energy is an energy resource, such as wind, water or solar energy, that is replenished within a short amount of time by natural processes. • Nonrenewable energy is an energy resource, such as coal or oil, that is a finite energy source that cannot be replenished in a short amount of time. 	
PRINT RESOURCES	DIGITAL RESOURCES
<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> • Unit 3, Lessons 1 • Unit 3, TE pages 91A-104A • Unit 3, Inquiry Flip Chart page 17 	<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> • Unit 3, Lesson 1 Digital Lesson
SCIENCE AND ACADEMIC VOCABULARY	
<p>Conservation, Fossil Fuel, Natural Resource, Nonrenewable Resources, Pollution, Renewable Resources</p>	
DIFFERENTIATION	FIELD EXPERIENCE CONNECTIONS
<p>Basic (Extra Support)</p> <ul style="list-style-type: none"> • Unit 3 Response to Intervention - TE page 89K • Unit 3 TE pages 97, 99, 101 <p>Advanced (Enrichment)</p> <ul style="list-style-type: none"> • Unit 3 TE pages 97, 99, 101 <p>English Language Learners</p> <ul style="list-style-type: none"> • Unit 3 TE pages 89L-89M, 93, 95, 96, 100 	<p>Greater Cleveland Aquarium's N.E.M.O: Nurturing the Environment by Maintaining Ohio Program.</p> <p>Program details: Aquatic animal adaptation investigation. Use STEM design to build a model fish to live in a specific habitat, Predict how environmental changes may affect fish. To prepare in advance-attend two professional development sessions to receive Classroom Aquarium and a flash drive with year-long curriculum connections.</p> <p>For information contact: Ray Patacca & Erin Bauer 216-862-8803 x7703 or education@greaterclevelandaquarium.com</p>
INQUIRY SKILLS	
<ul style="list-style-type: none"> • Compare • Draw Conclusions • Gather, Record, Display, or Interpret Data 	<ul style="list-style-type: none"> • Observe • Plan and Conduct a Simple Investigation
HANDS-ON INQUIRY AND APPLICATION	
<ul style="list-style-type: none"> • "Polluted Plants" (Flipchart page 17, TE pages 89D, 91A) 	<ul style="list-style-type: none"> • "Clean It Up!"(Flipchart page 17, TE 89D, 91A)
ASSESSMENTS/PROGRESS MONITORING	ASSESSMENT GUIDE
<ul style="list-style-type: none"> • Sum it Up <ul style="list-style-type: none"> ○ Unit 3, Lesson 1 - SE page 102, TE page 102 • Brain Check and Apply Concepts <ul style="list-style-type: none"> ○ Unit 3, Lesson 1 - SE pages 103-104, TE pages 103-104 	<ul style="list-style-type: none"> • Lesson Quiz <ul style="list-style-type: none"> ○ Unit 3, Lesson 1 - page AG 25
ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: ELA	
<p>Journeys</p> <ul style="list-style-type: none"> • Writing Connection - TE page 98 	

ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: MATH

Math Expressions

- Math Connection - TE page 111
- Math Connection - TE page 94
- Math Expressions Connections:
 - Unit 1 Lesson 2: Multiplication as Equal Groups MX TE pages 13-15
 - Unit 1 Lesson 6: Building Fluency with 2s and 5s MX TE page 60
 - Unit 1 Lesson 9: Building Fluency with 2s, 5s, 9s, and 10s MX TE page 85
 - Unit 1 Lesson 14: Building Fluency with 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 85-86
 - Unit 1 Lesson 16: Solve and Create Word Problems MX TE pages 147-148
 - Unit 1 Lesson 18: Building Fluency with 0s, 1s, 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 159-160
 - Unit 2 Lesson 4: Write Word Problems and Equations MX TE pages 204-208
 - Unit 2 Lesson 7: Practice with 6s, 7s, and 8s MX TE page 230
 - Unit 3 Lesson 10: Solve Word Problems Involving Time MX TE pages 367-368
 - Unit 3 Lesson 14: Use Graphs to Solve Time and Measurement Word Problems MX TE pages 396-398
 - Unit 4 Lesson 3: Place Value in Word Problems MX TE pages 432-434
 - Unit 4 Lesson 4: Practice with Place Value MX TE page 439
 - Unit 4 Lesson 8: Discuss Addition Methods MX TE page 468
 - Unit 4 Lesson 9: The Grouping Concept in Addition MX TE page 478
 - Unit 4 Lesson 17: Solve Word Problems MX TE pages 538-542
 - Unit 5 Lesson 1: Addition and Subtraction Situations MX TE pages 556-561
 - Unit 5 Lesson 2: Word Problems with Unknown Addends or Unknown Factors MX TE pages 568-572
 - Unit 5 Lesson 3: Word Problems with Unknown Starts MX TE pages 576-580
 - Unit 5 Lesson 4: Comparison Problems MX TE pages 587-594
 - Unit 5 Lesson 5: Comparison Problems with Misleading Language MX TE pages 598-600
 - Unit 5 Lesson 6: Word Problems with Extra, Hidden, and Not Enough Information MX TE pages 604-608
- Make Connections - TE page 104A
- Math Connection - Calculate How Many Trees (Challenging)
 - Unit 1 Lesson 2: Multiplication as Equal Groups MX TE pages 13-15
 - Unit 1 Lesson 6: Building Fluency with 2s and 5s MX TE page 60
 - Unit 1 Lesson 9: Building Fluency with 2s, 5s, 9s, and 10s MX TE page 85
 - Unit 1 Lesson 14: Building Fluency with 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 85-86
 - Unit 1 Lesson 16: Solve and Create Word Problems MX TE pages 147-148
 - Unit 1 Lesson 18: Building Fluency with 0s, 1s, 2s, 3s, 4s, 5s MX TE pages 159-160
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SUGGESTED PACING				
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PRINT RESOURCES	DIGITAL RESOURCES			
<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> • Unit 3, Lessons 1-2 and 4 • Unit 3, TE pages 91A-106A, 121A-134A • Unit 3, Inquiry Flip Chart page 17-18, 21 • Science and Engineering Leveled Readers: <ul style="list-style-type: none"> ○ On-Level/Below Level: <i>What Are Natural Resources?</i> ○ Above Level: <i>Let's Recycle and Reuse!</i> 	<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> • Unit 3, Lesson 1 Digital Lesson • Unit 3, Lesson 2 Digital Lesson with Virtual Lab • Unit 3, Lesson 4 Digital Lesson 			
SCIENCE AND ACADEMIC VOCABULARY				
<p>Clay, Conservation, Fossil Fuel, Humus, Natural Resource, Nonrenewable Resources, Nutrients, Pollution, Renewable Resources, Sand, Silt, Soil</p>				
DIFFERENTIATION	FIELD EXPERIENCE CONNECTIONS			
<p>Basic (Extra Support)</p> <ul style="list-style-type: none"> • Unit 3 Response to Intervention - TE page 89K • Unit 3 TE pages 97, 99, 101, 125, 127 <p>Advanced (Enrichment)</p> <ul style="list-style-type: none"> • Unit 3 TE pages 97, 99, 101, 125, 127 • Unit 3 STEM - Flipchart page 19, TE pages 89F, 107-108B <p>English Language Learners</p> <ul style="list-style-type: none"> • Unit 3 TE pages 89L-89M, 93, 95, 96, 100, 122, 124, 128, 131 	<p>Greater Cleveland Aquarium's N.E.M.O: Nurturing the Environment by Maintaining Ohio Program.</p> <p>Program details: Aquatic animal adaptation investigation. Use STEM design to build a model fish to live in a specific habitat, Predict how environmental changes may affect fish. To prepare in advance-attend two professional development sessions to receive Classroom Aquarium and a flash drive with year-long curriculum connections.</p> <p>For information contact: Ray Patacca & Erin Bauer 216-862-8803 x7703 or education@greaterclevelandaquarium.com</p>			
INQUIRY SKILLS				
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; border: none;"> <ul style="list-style-type: none"> • Classify/Order • Communicate • Compare </td> <td style="width: 33%; border: none;"> <ul style="list-style-type: none"> • Draw Conclusions • Gather, Record, Display, or Interpret Data • Infer </td> <td style="width: 33%; border: none;"> <ul style="list-style-type: none"> • Observe • Plan and Conduct a Simple Investigation • Predict </td> </tr> </table>		<ul style="list-style-type: none"> • Classify/Order • Communicate • Compare 	<ul style="list-style-type: none"> • Draw Conclusions • Gather, Record, Display, or Interpret Data • Infer 	<ul style="list-style-type: none"> • Observe • Plan and Conduct a Simple Investigation • Predict
<ul style="list-style-type: none"> • Classify/Order • Communicate • Compare 	<ul style="list-style-type: none"> • Draw Conclusions • Gather, Record, Display, or Interpret Data • Infer 	<ul style="list-style-type: none"> • Observe • Plan and Conduct a Simple Investigation • Predict 		
HANDS-ON INQUIRY AND APPLICATION				
<ul style="list-style-type: none"> • "Polluted Plants" (Flipchart page 17, TE pages 89D, 91A) • "Clean It Up!"(Flipchart page 17, TE 89D, 91A) • "How Can We Conserve Resources?" (Flipchart page 18, TE pages 89E, 105A-106) • "Forming Soil" (Flipchart page 21, TE page 89H, 121A) • "Compost It!" (Flipchart page 21, TE page 89H, 121A) 	<p><i>Differentiated Inquiry</i></p> <ul style="list-style-type: none"> • Unit 5, TE page 106A <ul style="list-style-type: none"> ○ How Much Paper Do You Use? (Easy) ○ Marketing Campaign (Average) ○ Analyze Data (Average) • Design a Recycling Program (Challenging) 			
ASSESSMENTS/PROGRESS MONITORING	ASSESSMENT GUIDE			
<ul style="list-style-type: none"> • Sum it Up <ul style="list-style-type: none"> ○ Unit 3, Lesson 1 - SE page 102, TE page 102 ○ Unit 3, Lesson 4 - SE page 132, TE page 132 • Brain Check and Apply Concepts <ul style="list-style-type: none"> ○ Unit 3, Lesson 1 - SE pages 103-104, TE pages 103-104 ○ Unit 3, Lesson 4 - SE pages 133-134, TE pages 133-134 • Unit 3 Review - TE pages 139A-142 • Unit 3 Short Option Performance Assessment - TE page 141 	<ul style="list-style-type: none"> • Lesson Quiz <ul style="list-style-type: none"> ○ Unit 3, Lesson 1 - page AG 25 ○ Unit 3, Lesson 2 - page AG 26 ○ Unit 3, Lesson 4 - page AG 28 • Unit 3 Test and Performance Task with Long Option Rubric - pages AG 30-AG 36 			

ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: ELA

Journeys

- Writing Connection - TE page 98
- Writing Connection - TE page 123
- Writing Connection - TE page 126
- Writing Connection - TE page 129
- Make Connections - TE page 134A
 - Writing Connection - Picture Dictionary (Easy)
 - Writing Connection - A Worm's Tale (Average)

ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: MATH

Math Expressions

- Math Connection - TE page 92
- *Math Expressions Connections:*
 - Unit 1 Lesson 2: Multiplication as Equal Groups MX TE pages 13-15
 - Unit 1 Lesson 6: Building Fluency with 2s and 5s MX TE page 60
 - Unit 1 Lesson 9: Building Fluency with 2s, 5s, 9s, and 10s MX TE page 85
 - Unit 1 Lesson 14: Building Fluency with 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 85-86
 - Unit 1 Lesson 16: Solve and Create Word Problems MX TE pages 147-148
 - Unit 1 Lesson 18: Building Fluency with 0s, 1s, 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 159-160
 - Unit 2 Lesson 4: Write Word Problems and Equations MX TE pages 204-208
 - Unit 2 Lesson 7: Practice with 6s, 7s, and 8s MX TE page 230
 - Unit 3 Lesson 10: Solve Word Problems Involving Time MX TE pages 367-368
 - Unit 3 Lesson 14: Use Graphs to Solve Time and Measurement Word Problems MX TE pages 396-398
 - Unit 4 Lesson 3: Place Value in Word Problems MX TE pages 432-434
 - Unit 4 Lesson 4: Practice with Place Value MX TE page 439
 - Unit 4 Lesson 8: Discuss Addition Methods MX TE page 468
 - Unit 4 Lesson 9: The Grouping Concept in Addition MX TE page 478
 - Unit 4 Lesson 17: Solve Word Problems MX TE pages 538-542
 - Unit 5 Lesson 1: Addition and Subtraction Situations MX TE pages 556-561
 - Unit 5 Lesson 2: Word Problems with Unknown Addends or Unknown Factors MX TE pages 568-572
 - Unit 5 Lesson 3: Word Problems with Unknown Starts MX TE pages 576-580
 - Unit 5 Lesson 4: Comparison Problems MX TE pages 587-594
 - Unit 5 Lesson 5: Comparison Problems with Misleading Language MX TE pages 598-600
 - Unit 5 Lesson 6: Word Problems with Extra, Hidden, and Not Enough Information MX TE pages 604-608
- Math Connection - TE page 94
- *Math Expressions Connections:*
 - Unit 1 Lesson 2: Multiplication as Equal Groups MX TE pages 13-15
 - Unit 1 Lesson 6: Building Fluency with 2s and 5s MX TE page 60
 - Unit 1 Lesson 9: Building Fluency with 2s, 5s, 9s, and 10s MX TE page 85
 - Unit 1 Lesson 14: Building Fluency with 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 85-86
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 - Unit 5 Lesson 6: Word Problems with Extra, Hidden, and Not Enough Information MX TE pages 604-608

ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: MATH *cont.*Math Expressions *cont.*

- Make Connections - TE page 104A
- Math Connection - Calculate How Many Trees (Challenging)
 - Unit 1 Lesson 2: Multiplication as Equal Groups MX TE pages 13-15
 - Unit 1 Lesson 6: Building Fluency with 2s and 5s MX TE page 60
 - Unit 1 Lesson 9: Building Fluency with 2s, 5s, 9s, and 10s MX TE page 85
 - Unit 1 Lesson 14: Building Fluency with 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 85-86
 - Unit 1 Lesson 16: Solve and Create Word Problems MX TE pages 147-148
 - Unit 1 Lesson 18: Building Fluency with 0s, 1s, 2s, 3s, 4s, 5s MX TE pages 159-160
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 - Unit 5 Lesson 6: Word Problems with Extra, Hidden, and Not Enough Information MX TE pages 604-608
- Math *Connection* - TE page 130
- *Math Expressions Connections*:
 - Unit 3 Lesson 11: Read and Create Pictographs and Bar Graphs MX TE pages 374-378
 - Unit 3 Lesson 12: Read and Create Bar Graphs with Multidigit Numbers MX TE pages 382-386
 - Unit 3 Lesson 14: Use Graphs to Solve Time and Measurement Word Problems MX TE pages 396-398
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 - Unit 5 Lesson 3: Word Problems with Unknown Starts MX TE pages 576-580

SUGGESTED PACING	
<p>STRAND: LIFE SCIENCE (LS) Topic: Behavior, Growth and Changes This topic explores life cycles of organisms and the relationship between the natural environment and an organism's (physical and behavioral) traits, which affect its ability to survive and reproduce. Content Statements:</p> <ul style="list-style-type: none"> • Offspring resemble their parents and each other. • Individual organisms inherit many traits from their parents indicating a reliable way to transfer information from one generation to the next. • Some behavioral traits are learned through interactions with the environment and are not inherited 	
PRINT RESOURCES	DIGITAL RESOURCES
<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> • Unit 4, Lessons 1-2 and 6 • Unit 4, TE pages 145A-168A, 187A-198A • Unit 4, Inquiry Flip Chart pages 23-24, 28 • Science and Engineering Leveled Readers: <ul style="list-style-type: none"> ○ On-Level/Below Level: <i>How Do Living Things Change and Grow?</i> ○ Above Level: <i>Surprising Adaptations</i> 	<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> • Unit 4, Lesson 1 Digital Lesson • Unit 4, Lesson 2 Digital Lesson • Unit 4, Lesson 6 Digital Lesson
SCIENCE AND ACADEMIC VOCABULARY	
<p>Behavior, Cone, Flower, Germinate, Hibernate, Larva, Life Cycle, Metamorphosis, Migrate, Pollen, Pollination, Pupa, Reproduce, Spore, Tadpole</p>	
DIFFERENTIATION	FIELD EXPERIENCE CONNECTIONS
<p>Basic (Extra Support)</p> <ul style="list-style-type: none"> • Unit 4 Response to Intervention - TE page 143K • Unit 4 TE pages 146, 151, 156, 159, 162, 164, 189, 191, 193, 194 <p>Advanced (Enrichment)</p> <ul style="list-style-type: none"> • Unit 4 TE pages 146, 151, 156, 159, 162, 164, 189, 191, 193, 194 <p>English Language Learners</p> <ul style="list-style-type: none"> • Unit 4 TE pages 143L-143M, 147, 148, 158, 161, 163, 165, 188, 195 	<p>Chickquest: a Classroom Journey Through the Life Cycle of Chickens Program Details A series of 18 standards-based lessons (30-45 minutes in length) taught over a 3-week period during which eggs are incubating in the elementary classroom. From monitoring living eggs to observing fluffy chicks, these lively activities pique curiosity, encourage collaboration and communication, and provide young scientists with unforgettable experiences. Students learn that agriculture is the number one industry in Ohio and can view a video of the inside of an egg-laying facility to understand the connection between animals, food production and the eggs in their refrigerator. These activities are designed to address the ODE Science Standards for Grade 3.</p> <p>For more information and to register for September 26 & 27, 2016 district-wide training visit: grownextgen.org/events</p>
INQUIRY SKILLS	
<ul style="list-style-type: none"> • Classify/Order • Communicate • Compare • Formulate or Use Models • Gather, Record, Display, or Interpret Data • Infer • Observe • Plan and Conduct a Simple Investigation 	
HANDS-ON INQUIRY AND APPLICATION	
<ul style="list-style-type: none"> • "Make it Germinate" (Flipchart page 23, TE pages 143D, 145A) • "Flowers and Cones" (Flipchart page 23, TE pages 143D, 145A) • "Model a Life Cycle" (Flipchart page 24, TE pages 143E, 155A) • "Plan a Life Cycle Observation" (Flipchart page 24, TE pages 143E, 155A) • "Instinct or Learned Behavior" (Flipchart page 28, TE pages 143H, 187A) • "Plan a Lesson" (Flipchart page 28, TE pages 134I, 187A) 	

ASSESSMENTS/PROGRESS MONITORING	ASSESSMENT GUIDE
<ul style="list-style-type: none"> • Sum it Up <ul style="list-style-type: none"> ○ Unit 4, Lesson 1 - SE page 152, TE page 152 ○ Unit 4, Lesson 2 - SE page 166, TE page 166 ○ Unit 4, Lesson 6 - SE page 196, TE page 196 • Brain Check and Apply Concepts <ul style="list-style-type: none"> ○ Unit 4, Lesson 1 - SE pages 153-154, TE pages 153-154 ○ Unit 4, Lesson 2 - SE pages 167-168, TE pages 167-168 ○ Unit 4, Lesson 6 - SE pages 197-198, TE pages 197-198 	<ul style="list-style-type: none"> • Lesson Quiz <ul style="list-style-type: none"> ○ Unit 4, Lesson 1 - page AG 37 ○ Unit 4, Lesson 2 - page AG 38 ○ Unit 4, Lesson 6 - page AG 42

ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: ELA

Journeys

- Writing Connection: TE page 150
- Writing Connection: TE page 160
- Make Connections: TE page 168A
 - Language Arts Connection: Write a Poem (Challenging)
- Writing Connection: TE page 192
- Make Connections: TE page 198A
 - Language Arts Connection: Personal Essay (Easy)
 - Language Arts Connection: "Something Told the Wild Goose" (Average)

Journeys Connections

Lesson 6

- Whole Group: Teacher Read Aloud: Bats Are the Best Beasts (T14)
- Whole Group: Anchor Text: Bat Loves the Night (T22)
- Whole Group: Poetry: A Bat is Born (T54)
- Small Group: Vocabulary Reader: Nighttime Animals (T76)
- Small Group: Struggling Reader: Chased by a Bat! (T82)
- Small Group: On Level Reader: A Sound in the Ground (T83)
- Small Group: Advanced Reader: Life in a Cave (T84)

Lesson 8

- Whole Group: Teacher Read Aloud: Sweet Berries (T196)

Lesson 18

- Whole Group: Teacher Read Aloud: The World Tree (T202)
- Whole Group: Anchor Text: A Tree is Growing (T210)
- Small Group: Struggling Reader: Daffodil Spring (T274)
- Small Group: On Level Reader: Wind in the Pines (T275)
- Small Group: Advanced Reader: The Power of Corn (T276)

Lesson 20

- Whole Group: Teacher Read Aloud: Clever Colonies (T388)
- Small Group: Vocabulary Reader: Emperor Penguins (T456)
- Small Group: Struggling Reader: Watch Out! Polar Bears! (T462)

Lesson 22

- Whole Group: Anchor Text: The Journey: Stories of Migration (T112)
- Small Group: Vocabulary Reader: Flight of the Swallows (T168)
- Small Group: Struggling Reader: Monarchs on the Move (T174)
- Small Group: On Level Reader: Fish on the Move (T175)
- Small Group: Advanced Reader: Rescuing the Whooping Crane (T176)

Lesson 24

- Small Group: Vocabulary Reader: Sea Lions (T354)
- Small Group: Advanced Reader: Friends with Wings (T362)

ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: MATH

Math Expressions

- Math Connection - TE page 149
- *Math Expressions Connections:*
 - Unit 4 Lesson 6: Round to the Nearest Ten MX TE pages 452-456
- Make Connections - TE page 154A
- Math Connection - Solve a Word Problem (Average)
- *Math Expressions Connections:*
 - Unit 2 Lesson 10: Write First Step Questions for Two Step Problems MX TE pages 250-254
 - Unit 2 Lesson 11: Make Sense of Two Step Word Problems MX TE pages 258-260
 - Unit 2 Lesson 13: Play Multiplication and Division Games MX TE page 271
 - Unit 5 Lesson 7: Write First Step Questions for Two Step Problems MX TE pages 612-614
 - Unit 5 Lesson 8: Solve Two Step Word Problems MX TE pages 618-626
 - Unit 5 Lesson 9: Equations and Two Step Word Problems MX TE pages 630-632
 - Unit 5 Lesson 10: Practice with Two Step Word Problems MX TE pages 636-638
- Math Connection - TE page 157
- *Math Expressions Connections:*
 - Unit 1 Lesson 2: Multiplication as Equal Groups MX TE pages 13-15
 - Unit 1 Lesson 6: Building Fluency with 2s and 5s MX TE page 60
 - Unit 1 Lesson 9: Building Fluency with 2s, 5s, 9s, and 10s MX TE page 85
 - Unit 1 Lesson 14: Building Fluency with 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 85-86
 - Unit 1 Lesson 16: Solve and Create Word Problems MX TE pages 147-148
 - Unit 1 Lesson 18: Building Fluency with 0s, 1s, 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 159-160
 - Unit 2 Lesson 4: Write Word Problems and Equations MX TE pages 204-208
 - Unit 2 Lesson 7: Practice with 6s, 7s, and 8s MX TE page 230
 - Unit 3 Lesson 10: Solve Word Problems Involving Time MX TE pages 367-368
 - Unit 3 Lesson 14: Use Graphs to Solve Time and Measurement Word Problems MX TE pages 396-398
 - Unit 4 Lesson 3: Place Value in Word Problems MX TE pages 432-434
 - Unit 4 Lesson 4: Practice with Place Value MX TE page 439
 - Unit 4 Lesson 8: Discuss Addition Methods MX TE page 468
 - Unit 4 Lesson 9: The Grouping Concept in Addition MX TE page 478
 - Unit 4 Lesson 17: Solve Word Problems MX TE pages 538-542
 - Unit 5 Lesson 1: Addition and Subtraction Situations MX TE pages 556-561
 - Unit 5 Lesson 2: Word Problems with Unknown Addends or Unknown Factors MX TE pages 568-572
 - Unit 5 Lesson 3: Word Problems with Unknown Starts MX TE pages 576-580
 - Unit 5 Lesson 4: Comparison Problems MX TE pages 587-594
 - Unit 5 Lesson 5: Comparison Problems with Misleading Language MX TE pages 598-600
 - Unit 5 Lesson 6: Word Problems with Extra, Hidden, and Not Enough Information MX TE pages 604-608
- Make Connections - TE page 168A
- Math Connection - Draw It to Scale (Average)
- *Math Expressions Connections:*
 - Unit 1 Lesson 11: Multiplication and Area MX TE page 107
- Math Connection - TE page 190
- *Math Expressions Connections:*
 - Unit 1 Lesson 6: Building Fluency with 2s and 5s MX TE page 60
 - Unit 1 Lesson 9: Building Fluency with 2s, 5s, 9s, and 10s MX TE page 85
 - Unit 1 Lesson 14: Building Fluency with 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 85-86
 - Unit 1 Lesson 16: Solve and Create Word Problems MX TE pages 147-148
 - Unit 1 Lesson 18: Building Fluency with 0s, 1s, 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 159-160
 - Unit 2 Lesson 4: Write Word Problems and Equations MX TE pages 204-208
 - Unit 2 Lesson 7: Practice with 6s, 7s, and 8s MX TE page 230
 - Unit 4 Lesson 3: Place Value in Word Problems MX TE pages 432-434
 - Unit 4 Lesson 4: Practice with Place Value MX TE page 439
 - Unit 5 Lesson 2: Word Problems with Unknown Addends or Unknown Factors MX TE pages 568-572

SUGGESTED PACING	
<p>STRAND: LIFE SCIENCE (LS) Topic: Behavior, Growth and Changes This topic explores life cycles of organisms and the relationship between the natural environment and an organism's (physical and behavioral) traits, which affect its ability to survive and reproduce. Content Statements:</p> <ul style="list-style-type: none"> • Individuals of the same kind differ in their traits and sometimes the differences give individuals an advantage in surviving and reproducing. • Plants and animals have physical features that are associated with the environments where they live. • Plants and animals have certain physical or behavioral characteristics that improve their chances of surviving in particular environments. • Individuals of the same kind have different characteristics that they have inherited. Sometimes these different characteristics give individuals an advantage in surviving and reproducing. 	
PRINT RESOURCES	DIGITAL RESOURCES
<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> • Unit 4, Lessons 2, 4 and 5 • Unit 4, TE pages 155A-168A, 171A-186A • Unit 4, Inquiry Flip Chart pages 24, 26-27 • Science and Engineering Leveled Readers: <ul style="list-style-type: none"> ○ On-Level/Below Level: <i>How Do Living Things Change and Grow?</i> ○ Above Level: <i>Surprising Adaptations</i> 	<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> • Unit 4, Lesson 2 Digital Lesson • Unit 4, Lesson 4 Digital Lesson • Unit 4, Lesson 5 Digital Lesson with Virtual Lab
SCIENCE AND ACADEMIC VOCABULARY	
<p>Adaptation, Camouflage, Larva, Metamorphosis, Mimicry, Pupa, Tadpole</p>	
DIFFERENTIATION	FIELD EXPERIENCE CONNECTIONS
<p>Basic (Extra Support)</p> <ul style="list-style-type: none"> • Unit 4 Response to Intervention - TE page 143K • Unit 4 TE pages 156, 159, 162, 164, 172, 177, 178 <p>Advanced (Enrichment)</p> <ul style="list-style-type: none"> • Unit 4 TE pages 156, 159, 162, 164, 172, 177, 178 <p>English Language Learners</p> <ul style="list-style-type: none"> • Unit 4 TE pages 143L-143M, 147, 148, 158, 161, 163, 165, 173, 174, 179 	<p>Chickquest: a Classroom Journey Through the Life Cycle of Chickens Program Details A series of 18 standards-based lessons (30-45 minutes in length) taught over a 3-week period during which eggs are incubating in the elementary classroom. From monitoring living eggs to observing fluffy chicks, these lively activities pique curiosity, encourage collaboration and communication, and provide young scientists with unforgettable experiences. Students learn that agriculture is the number one industry in Ohio and can view a video of the inside of an egg-laying facility to understand the connection between animals, food production and the eggs in their refrigerator. These activities are designed to address the ODE Science Standards for Grade 3.</p> <p>For more information and to register for September 26 & 27, 2016 district-wide training visit: grownextgen.org/events</p>
INQUIRY SKILLS	
<ul style="list-style-type: none"> • Communicate • Draw Conclusions • Formulate or Use Models • Gather, Record, Display, or Interpret Data • Infer • Observe • Plan and Conduct a Simple Investigation • Predict 	
HANDS-ON INQUIRY AND APPLICATION	
<ul style="list-style-type: none"> • "Model a Life Cycle" (Flipchart page 24, TE pages 143E, 155A) • "Plan a Life Cycle Observation" (Flipchart page 24, TE pages 143E, 155A) • "Show and Tell" (Flipchart page 26, TE pages 143G, 171A) • "Adapted to Survive" (Flipchart page 26, TE pages 143G, 171A) • "How Can We Model a Physical Adaptation?" (Flipchart page 27, TE pages 143H, 185A-186) 	<p><i>Differentiated Inquiry</i></p> <ul style="list-style-type: none"> • Unit 4, TE page 186A <ul style="list-style-type: none"> ○ Make a Graph (Easy) ○ Research Frog Adaptations (Average) ○ Other Tongues (Average) ○ Design Experiment (Challenging)

ASSESSMENTS/PROGRESS MONITORING	ASSESSMENT GUIDE
<ul style="list-style-type: none"> • Sum it Up <ul style="list-style-type: none"> ○ Unit 4, Lesson 2 - SE page 166, TE page 166 ○ Unit 4, Lesson 4 - SE page 180, TE page 180 • Brain Check and Apply Concepts <ul style="list-style-type: none"> ○ Unit 4, Lesson 2 - SE pages 167-168, TE pages 167-168 ○ Unit 4, Lesson 4 - SE pages 181-182, TE pages 181-182 	<ul style="list-style-type: none"> • Lesson Quiz <ul style="list-style-type: none"> ○ Unit 4, Lesson 2 - page AG 38 ○ Unit 4, Lesson 4 - page AG 40 ○ Unit 4, Lesson 5 - page AG 41
ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: ELA	
<p>Journeys</p> <ul style="list-style-type: none"> • Writing Connection: TE page 160 • Make Connections: TE page 168A <ul style="list-style-type: none"> ○ Language Arts Connection: Write a Poem (Challenging) • Writing Connection - TE page 176 • Make Connections - TE page 182A <ul style="list-style-type: none"> ○ Language Arts Connection - Write a Story (Challenging) • Writing Connection - TE page 184 <p><i>Journeys Connections</i></p> <p>Lesson 6</p> <ul style="list-style-type: none"> • Whole Group: Teacher Read Aloud: Bats Are the Best Beasts (T14) • Whole Group: Anchor Text: Bat Loves the Night (T22) • Whole Group: Poetry: A Bat is Born (T54) • Small Group: Vocabulary Reader: Nighttime Animals (T76) • Small Group: Struggling Reader: Chased by a Bat! (T82) • Small Group: On Level Reader: A Sound in the Ground (T83) • Small Group: Advanced Reader: Life in a Cave (T84) <p>Lesson 8</p> <ul style="list-style-type: none"> • Whole Group: Teacher Read Aloud: Sweet Berries (T196) <p>Lesson 18</p> <ul style="list-style-type: none"> • Whole Group: Teacher Read Aloud: The World Tree (T202) • Whole Group: Anchor Text: A Tree is Growing (T210) • Small Group: Struggling Reader: Daffodil Spring (T274) • Small Group: On Level Reader: Wind in the Pines (T275) • Small Group: Advanced Reader: The Power of Corn (T276) <p>Lesson 20</p> <ul style="list-style-type: none"> • Whole Group: Teacher Read Aloud: Clever Colonies (T388) • Small Group: Vocabulary Reader: Emperor Penguins (T456) • Small Group: Struggling Reader: Watch Out! Polar Bears! (T462) <p>Lesson 22</p> <ul style="list-style-type: none"> • Whole Group: Anchor Text: The Journey: Stories of Migration (T112) • Small Group: Vocabulary Reader: Flight of the Swallows (T168) • Small Group: Struggling Reader: Monarchs on the Move (T174) • Small Group: On Level Reader: Fish on the Move (T175) • Small Group: Advanced Reader: Rescuing the Whooping Crane (T176) <p>Lesson 24</p> <ul style="list-style-type: none"> • Small Group: Vocabulary Reader: Sea Lions (T354) • Small Group: Advanced Reader: Friends with Wings (T362) 	

ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: MATH

Math Expressions

- Math Connection - TE page 157, 175
- *Math Expressions Connections:*
 - Unit 1 Lesson 2: Multiplication as Equal Groups MX TE pages 13-15
 - Unit 1 Lesson 6: Building Fluency with 2s and 5s MX TE page 60
 - Unit 1 Lesson 9: Building Fluency with 2s, 5s, 9s, and 10s MX TE page 85
 - Unit 1 Lesson 14: Building Fluency with 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 85-86
 - Unit 1 Lesson 16: Solve and Create Word Problems MX TE pages 147-148
 - Unit 1 Lesson 18: Building Fluency with 0s, 1s, 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 159-160
 - Unit 2 Lesson 4: Write Word Problems and Equations MX TE pages 204-208
 - Unit 2 Lesson 7: Practice with 6s, 7s, and 8s MX TE page 230
 - Unit 3 Lesson 10: Solve Word Problems Involving Time MX TE pages 367-368
 - Unit 3 Lesson 14: Use Graphs to Solve Time and Measurement Word Problems MX TE pages 396-398
 - Unit 4 Lesson 3: Place Value in Word Problems MX TE pages 432-434
 - Unit 4 Lesson 4: Practice with Place Value MX TE page 439
 - Unit 4 Lesson 8: Discuss Addition Methods MX TE page 468
 - Unit 4 Lesson 9: The Grouping Concept in Addition MX TE page 478
 - Unit 4 Lesson 17: Solve Word Problems MX TE pages 538-542
 - Unit 5 Lesson 1: Addition and Subtraction Situations MX TE pages 556-561
 - Unit 5 Lesson 2: Word Problems with Unknown Addends or Unknown Factors MX TE pages 568-572
 - Unit 5 Lesson 3: Word Problems with Unknown Starts MX TE pages 576-580
 - Unit 5 Lesson 4: Comparison Problems MX TE pages 587-594
 - Unit 5 Lesson 5: Comparison Problems with Misleading Language MX TE pages 598-600
 - Unit 5 Lesson 6: Word Problems with Extra, Hidden, and Not Enough Information MX TE pages 604-608
- Make Connections - TE page 168A
- Math Connection - Draw It to Scale (Average)
- *Math Expressions Connections:*
 - Unit 1 Lesson 11: Multiplication and Area MX TE page 107
- Make Connections - TE page 168A
- Math Connection - Solve a Word Problem (Easy)
- *Math Expressions Connections:*
 - Unit 1 Lesson 2: Multiplication as Equal Groups MX TE pages 13-15
 - Unit 1 Lesson 6: Building Fluency with 2s and 5s MX TE page 60
 - Unit 1 Lesson 9: Building Fluency with 2s, 5s, 9s, and 10s MX TE page 85
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 - Unit 2 Lesson 7: Practice with 6s, 7s, and 8s MX TE page 230
 - Unit 4 Lesson 3: Place Value in Word Problems MX TE pages 432-434
 - Unit 4 Lesson 4: Practice with Place Value MX TE page 439
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 - Unit 5 Lesson 3: Word Problems with Unknown Starts MX TE pages 576-580

SUGGESTED PACING				
<p>STRAND: LIFE SCIENCE (LS) Topic: Behavior, Growth and Changes This topic explores life cycles of organisms and the relationship between the natural environment and an organism's (physical and behavioral) traits, which affect its ability to survive and reproduce. Content Statements:</p> <ul style="list-style-type: none"> Plants and animals have life cycles that are part of their adaptations for survival in their natural environments. Over the whole earth, organisms are growing, reproducing, dying and decaying. The details of the life cycle are different for different organisms, which affects their ability to survive and reproduce in their natural environments. 				
PRINT RESOURCES	DIGITAL RESOURCES			
<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> Unit 4, Lessons 1-3 Unit 4, TE pages 145A-170A Unit 4, Inquiry Flip Chart pages 23-25 Science and Engineering Leveled Readers: <ul style="list-style-type: none"> On-Level/Below Level: <i>How Do Living Things Change and Grow?</i> Above Level: <i>Surprising Adaptations</i> 	<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> Unit 4, Lesson 1 Digital Lesson Unit 4, Lesson 2 Digital Lesson Unit 4, Lesson 3 Digital Lesson with Virtual Lab 			
SCIENCE AND ACADEMIC VOCABULARY				
<p>Cone, Flower, Germinate, Larva, Life Cycle, Metamorphosis, Pollen, Pollination, Pupa, Reproduce, Spore, Tadpole</p>				
DIFFERENTIATION	FIELD EXPERIENCE CONNECTIONS			
<p>Basic (Extra Support)</p> <ul style="list-style-type: none"> Unit 4 Response to Intervention - TE page 143K Unit 4 TE pages 146, 151, 156, 159, 162, 164 <p>Advanced (Enrichment)</p> <ul style="list-style-type: none"> Unit 4 TE pages 146, 151, 156, 159, 162, 164 <p>English Language Learners</p> <ul style="list-style-type: none"> Unit 4 TE pages 143L-143M, 147, 148, 158, 161, 163, 165 	<p>Chickquest: a Classroom Journey Through the Life Cycle of Chickens Program Details A series of 18 standards-based lessons (30-45 minutes in length) taught over a 3-week period during which eggs are incubating in the elementary classroom. From monitoring living eggs to observing fluffy chicks, these lively activities pique curiosity, encourage collaboration and communication, and provide young scientists with unforgettable experiences. Students learn that agriculture is the number one industry in Ohio and can view a video of the inside of an egg-laying facility to understand the connection between animals, food production and the eggs in their refrigerator. These activities are designed to address the ODE Science Standards for Grade 3.</p> <p>For more information and to register for September 26 & 27, 2016 district-wide training visit: grownextgen.org/events</p>			
INQUIRY SKILLS				
<table style="width: 100%; border: none;"> <tr> <td style="vertical-align: top; width: 33%;"> <ul style="list-style-type: none"> Classify Communicate Compare Formulate or Use Models </td> <td style="vertical-align: top; width: 33%;"> <ul style="list-style-type: none"> Gather, Record, Display, or Interpret Data Infer Measure Observe </td> <td style="vertical-align: top; width: 33%;"> <ul style="list-style-type: none"> Plan and Conduct a Simple Investigation Use Numbers </td> </tr> </table>		<ul style="list-style-type: none"> Classify Communicate Compare Formulate or Use Models 	<ul style="list-style-type: none"> Gather, Record, Display, or Interpret Data Infer Measure Observe 	<ul style="list-style-type: none"> Plan and Conduct a Simple Investigation Use Numbers
<ul style="list-style-type: none"> Classify Communicate Compare Formulate or Use Models 	<ul style="list-style-type: none"> Gather, Record, Display, or Interpret Data Infer Measure Observe 	<ul style="list-style-type: none"> Plan and Conduct a Simple Investigation Use Numbers 		
HANDS-ON INQUIRY AND APPLICATION				
<table style="width: 100%; border: none;"> <tr> <td style="vertical-align: top; width: 60%;"> <ul style="list-style-type: none"> "Make it Germinate" (Flipchart page 23, TE pages 143D, 145A) "Flowers and Cones" (Flipchart page 23, TE pages 143D, 145A) "Model a Life Cycle" (Flipchart page 24, TE pages 143E, 155A) "Plan a Life Cycle Observation" (Flipchart page 24, TE pages 143E, 155A) "How Do Living Things Change?" (Flipchart page 25, TE pages 143F, 169A-170A) </td> <td style="vertical-align: top; width: 40%;"> <p><i>Differentiated Inquiry</i></p> <ul style="list-style-type: none"> Unit 4, TE page 170A <ul style="list-style-type: none"> Continue the Life Cycle (Easy) Dissect Seeds (Average) Plant Different Seeds (Average) Cultivate Moss (Challenging) </td> </tr> </table>		<ul style="list-style-type: none"> "Make it Germinate" (Flipchart page 23, TE pages 143D, 145A) "Flowers and Cones" (Flipchart page 23, TE pages 143D, 145A) "Model a Life Cycle" (Flipchart page 24, TE pages 143E, 155A) "Plan a Life Cycle Observation" (Flipchart page 24, TE pages 143E, 155A) "How Do Living Things Change?" (Flipchart page 25, TE pages 143F, 169A-170A) 	<p><i>Differentiated Inquiry</i></p> <ul style="list-style-type: none"> Unit 4, TE page 170A <ul style="list-style-type: none"> Continue the Life Cycle (Easy) Dissect Seeds (Average) Plant Different Seeds (Average) Cultivate Moss (Challenging) 	
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ASSESSMENTS/PROGRESS MONITORING	ASSESSMENT GUIDE
<ul style="list-style-type: none"> • Sum it Up <ul style="list-style-type: none"> ○ Unit 4, Lesson 1 - SE page 152, TE page 152 ○ Unit 4, Lesson 2 - SE page 166, TE page 166 • Brain Check and Apply Concepts <ul style="list-style-type: none"> ○ Unit 4, Lesson 1 - SE pages 153-154, TE pages 153-154 ○ Unit 4, Lesson 2 - SE pages 167-168, TE pages 167-168 	<ul style="list-style-type: none"> • Lesson Quiz <ul style="list-style-type: none"> ○ Unit 4, Lesson 1 - page AG 37 ○ Unit 4, Lesson 2 - page AG 38 ○ Unit 4, Lesson 3 - page AG 39
ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: ELA	
<p>Journeys</p> <ul style="list-style-type: none"> • Writing Connection - TE page 150 • Writing Connection: TE page 160 • Make Connections: TE page 168A <ul style="list-style-type: none"> ○ Language Arts Connection: Write a Poem (Challenging) <p><i>Journeys Connections</i></p> <p>Lesson 6</p> <ul style="list-style-type: none"> • Whole Group: Teacher Read Aloud: Bats Are the Best Beasts (T14) • Whole Group: Anchor Text: Bat Loves the Night (T22) • Whole Group: Poetry: A Bat is Born (T54) • Small Group: Vocabulary Reader: Nighttime Animals (T76) • Small Group: Struggling Reader: Chased by a Bat! (T82) • Small Group: On Level Reader: A Sound in the Ground (T83) • Small Group: Advanced Reader: Life in a Cave (T84) <p>Lesson 8</p> <ul style="list-style-type: none"> • Whole Group: Teacher Read Aloud: Sweet Berries (T196) <p>Lesson 18</p> <ul style="list-style-type: none"> • Whole Group: Teacher Read Aloud: The World Tree (T202) • Whole Group: Anchor Text: A Tree is Growing (T210) • Small Group: Struggling Reader: Daffodil Spring (T274) • Small Group: On Level Reader: Wind in the Pines (T275) • Small Group: Advanced Reader: The Power of Corn (T276) <p>Lesson 20</p> <ul style="list-style-type: none"> • Whole Group: Teacher Read Aloud: Clever Colonies (T388) • Small Group: Vocabulary Reader: Emperor Penguins (T456) • Small Group: Struggling Reader: Watch Out! Polar Bears! (T462) <p>Lesson 22</p> <ul style="list-style-type: none"> • Whole Group: Anchor Text: The Journey: Stories of Migration (T112) • Small Group: Vocabulary Reader: Flight of the Swallows (T168) • Small Group: Struggling Reader: Monarchs on the Move (T174) • Small Group: On Level Reader: Fish on the Move (T175) • Small Group: Advanced Reader: Rescuing the Whooping Crane (T176) <p>Lesson 24</p> <ul style="list-style-type: none"> • Small Group: Vocabulary Reader: Sea Lions (T354) • Small Group: Advanced Reader: Friends with Wings (T362) 	

ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: MATH

Math Expressions

- Math Connection - TE page 149
- *Math Expressions Connections:*
 - Unit 4 Lesson 6: Round to the Nearest Ten MX TE pages 452-456
- Make Connections - TE page 154A
- Math Connection - Solve a Word Problem (Average)
- *Math Expressions Connections:*
 - Unit 2 Lesson 10: Write First Step Questions for Two Step Problems MX TE pages 250-254
 - Unit 2 Lesson 11: Make Sense of Two Step Word Problems MX TE pages 258-260
 - Unit 2 Lesson 13: Play Multiplication and Division Games MX TE page 271
 - Unit 5 Lesson 7: Write First Step Questions for Two Step Problems MX TE pages 612-614
 - Unit 5 Lesson 8: Solve Two Step Word Problems MX TE pages 618-626
 - Unit 5 Lesson 9: Equations and Two Step Word Problems MX TE pages 630-632
 - Unit 5 Lesson 10: Practice with Two Step Word Problems MX TE pages 636-638
- Math Connection - TE page 157
- *Math Expressions Connections:*
 - Unit 1 Lesson 2: Multiplication as Equal Groups MX TE pages 13-15
 - Unit 1 Lesson 6: Building Fluency with 2s and 5s MX TE page 60
 - Unit 1 Lesson 9: Building Fluency with 2s, 5s, 9s, and 10s MX TE page 85
 - Unit 1 Lesson 14: Building Fluency with 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 85-86
 - Unit 1 Lesson 16: Solve and Create Word Problems MX TE pages 147-148
 - Unit 1 Lesson 18: Building Fluency with 0s, 1s, 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 159-160
 - Unit 2 Lesson 4: Write Word Problems and Equations MX TE pages 204-208
 - Unit 2 Lesson 7: Practice with 6s, 7s, and 8s MX TE page 230
 - Unit 3 Lesson 10: Solve Word Problems Involving Time MX TE pages 367-368
 - Unit 3 Lesson 14: Use Graphs to Solve Time and Measurement Word Problems MX TE pages 396-398
 - Unit 4 Lesson 3: Place Value in Word Problems MX TE pages 432-434
 - Unit 4 Lesson 4: Practice with Place Value MX TE page 439
 - Unit 4 Lesson 8: Discuss Addition Methods MX TE page 468
 - Unit 4 Lesson 9: The Grouping Concept in Addition MX TE page 478
 - Unit 4 Lesson 17: Solve Word Problems MX TE pages 538-542
 - Unit 5 Lesson 1: Addition and Subtraction Situations MX TE pages 556-561
 - Unit 5 Lesson 2: Word Problems with Unknown Addends or Unknown Factors MX TE pages 568-572
 - Unit 5 Lesson 3: Word Problems with Unknown Starts MX TE pages 576-580
 - Unit 5 Lesson 4: Comparison Problems MX TE pages 587-594
 - Unit 5 Lesson 5: Comparison Problems with Misleading Language MX TE pages 598-600
 - Unit 5 Lesson 6: Word Problems with Extra, Hidden, and Not Enough Information MX TE pages 604-608
- Make Connections - TE page 168A
- Math Connection - Draw It to Scale (Average)
- *Math Expressions Connections:*
 - Unit 1 Lesson 11: Multiplication and Area MX TE page 107

SUGGESTED PACING	
<p>STRAND: PHYSICAL SCIENCE (PS) Topic: Matter and Forms of Energy This topic focuses on the relationship between matter and energy. Matter has specific properties and is found in all substances on Earth. Heat is a familiar form of energy that can change the states of matter. Content Statements:</p> <ul style="list-style-type: none"> All objects and substances in the natural world are composed of matter. Matter takes up space and has mass. 	
PRINT RESOURCES	DIGITAL RESOURCES
<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> Unit 5, Lesson 1 Unit 5, TE pages 207A-220A Unit 5, Inquiry Flip Chart page 30 Science and Engineering Leveled Readers: <ul style="list-style-type: none"> On-Level/Below Level: <i>How Can You Describe Matter??</i> Above Level: <i>Engineering Materials</i> 	<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> Unit 5, Lesson 1 Digital Lesson
	SCIENCE AND ACADEMIC VOCABULARY
	Mass, Matter, Physical Property, Temperature, Volume
DIFFERENTIATION	FIELD EXPERIENCE CONNECTIONS
<p>Basic (Extra Support)</p> <ul style="list-style-type: none"> Unit 5 Response to Intervention - TE page 205K Unit 5 TE pages 209, 211, 214 <p>Advanced (Enrichment)</p> <ul style="list-style-type: none"> Unit 5 TE pages 209, 211, 214 <p>English Language Learners</p> <ul style="list-style-type: none"> Unit 5 TE pages 205L-205M, 208, 215, 216 	
INQUIRY SKILLS	
<ul style="list-style-type: none"> Classify Communicate Compare 	<ul style="list-style-type: none"> Draw Conclusions Gather and Record Data
	<ul style="list-style-type: none"> Observe Plan and Conduct a Simple Investigation
HANDS-ON INQUIRY AND APPLICATION	
<ul style="list-style-type: none"> "Will It Float or Sink?" (Flipchart page 30, TE pages 205D, 207A) "Sort Some Matter" (Flipchart page 30, TE pages 205D, 207A) 	
ASSESSMENTS/PROGRESS MONITORING	ASSESSMENT GUIDE
<ul style="list-style-type: none"> Sum it Up <ul style="list-style-type: none"> Unit 5, Lesson 1 - SE page 218, TE page 218 Brain Check and Apply Concepts <ul style="list-style-type: none"> Unit 5, Lesson 1 - SE pages 219-220, TE pages 219-220 	<ul style="list-style-type: none"> Lesson Quiz <ul style="list-style-type: none"> Unit 5, Lesson 1 - page AG 50
ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: ELA & MATH	
<p>Journeys</p> <ul style="list-style-type: none"> Writing Connection - TE page 217 Make Connections - TE page 220A <ul style="list-style-type: none"> Writing Connection - Write a How-To Pamphlet (Average) 	<p>Math Expressions</p> <ul style="list-style-type: none"> Math Connection - TE page 213 <i>Math Expressions Connections:</i> <ul style="list-style-type: none"> Unit 3 Lesson 2: Customary Units of Liquid Volume MX TE pages 304-310 Unit 3 Lesson 3: Metric Units of Liquid Volume MX TE pages 314-318 Make Connections - TE page 220A Math Connection - Make a Bar Graph (Average) <i>Math Expressions Connections:</i> <ul style="list-style-type: none"> Unit 3 Lesson 11: Read and Create Pictographs and Bar Graphs MX TE pages 374-378 Unit 3 Lesson 12: Read and Create Bar Graphs with Multidigit Numbers MX TE pages 382-386 Unit 3 Lesson 14: Use Graphs to Solve Time and Measurement Word Problems MX TE pages 396-398

SUGGESTED PACING		
<p>STRAND: PHYSICAL SCIENCE (PS) Topic: Matter and Forms of Energy This topic focuses on the relationship between matter and energy. Matter has specific properties and is found in all substances on Earth. Heat is a familiar form of energy that can change the states of matter. Content Statements:</p> <ul style="list-style-type: none"> • Matter exists in different states, each of which has different properties. • The most common states of matter are solids, liquids and gases. • Shape and compressibility are properties that can distinguish between the states of matter. • One way to change matter from one state to another is by heating or cooling. 		
PRINT RESOURCES	DIGITAL RESOURCES	
<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> • Unit 5, All Lessons • Unit 5, TE pages 207A-260A • Unit 5, Inquiry Flip Chart page 30-35 • Science and Engineering Levelled Readers: <ul style="list-style-type: none"> ○ On-Level/Below Level: <i>How Can You Describe Matter??</i> ○ Above Level: <i>Engineering Materials</i> • Unit 6, TE pages 303A-314A • Unit 6, Inquiry Flip Chart page 42 	<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> • Unit 5, Lesson 2 Digital Lesson with Virtual Lab • Unit 5, Lesson 3 Digital Lesson with Virtual Lab • Unit 5, Lesson 4 Digital Lesson with Virtual Lab • Unit 5, Lesson 5 Digital Lesson • Unit 5, Lesson 6 Digital Lesson • Unit 6, Lesson 5 Digital Lesson 	
SCIENCE AND ACADEMIC VOCABULARY		
<p>Chemical Change, Condensation, Dissolve, Evaporation, Gas, Liquid, Mass, Matter, Mixture, Physical Change, Physical Property, Solid, Solution, Temperature, Volume</p>		
DIFFERENTIATION	FIELD EXPERIENCE CONNECTIONS	
<p>Basic (Extra Support)</p> <ul style="list-style-type: none"> • Unit 5 Response to Intervention - TE page 205K • Unit 5 TE pages 209, 211, 214, 231, 233, 242, 243, 247 • Unit 6 Response to Intervention - TE page 261K • Unit 6 TE pages 308, 311 <p>Advanced (Enrichment)</p> <ul style="list-style-type: none"> • Unit 5 TE pages 209, 211, 214, 231, 233, 242, 243, 247 • Unit 5 STEM - Flipchart page 36, TE pages 205I, 255-256B • Unit 6 TE pages 308, 311 <p>English Language Learners</p> <ul style="list-style-type: none"> • Unit 5 TE pages 205L-205M, 208, 215, 216, 230, 236, 244, 245, 248, 251 • Unit 6 TE pages 261L-261M, 306, 310 		
INQUIRY SKILLS		
<ul style="list-style-type: none"> • Classify • Communicate • Compare • Draw Conclusions • Gather and Record Data 	<ul style="list-style-type: none"> • Hypothesize • Identify and Control Variables • Infer • Measure 	<ul style="list-style-type: none"> • Observe • Plan and Conduct a Simple Investigation • Predict • Use Numbers

HANDS-ON INQUIRY AND APPLICATION	
<ul style="list-style-type: none"> • “Will It Float or Sink?” (Flipchart page 30, TE pages 205D, 207A) • “Sort Some Matter” (Flipchart page 30, TE pages 205D, 207A) • “How Can We Measure Magnetism?” (Flipchart page 31, TE pages 205E, 221A-222) • “What Physical Properties Can We Observe?” (Flipchart page 32, TE pages 205F, 225A-226) • “How Is Temperature Measured?” (Flipchart page 33, TE pages 205 G, 227A-228) • “Temperature Takes a Dive” (Flipchart page 34, TE pages 205G, 229A) • “The Shape of Different States” (Flipchart page 34, TE pages 205H, 229A) • “Break It Up” (Flipchart page 35, TE pages 205H, 241A) • “Coming Apart: (Flipchart page 35, TE pages 205I, 241A) • “Heat Race” (Flipchart page 42, TE pages 261H, 303A) • “Where There’s Light...” (Flipchart page 42, TE pages 261H, 303A) 	<p><i>Differentiated Inquiry</i></p> <ul style="list-style-type: none"> • Unit 5, TE page 222A <ul style="list-style-type: none"> ○ Check Your Results (Easy) ○ Test and Measure the Magnetism of an Electromagnet (Average) ○ Measure Magnetism a Different Way (Average) ○ Increase the Strength of an Electromagnet (Challenging) • Unit 5, TE page 226A <ul style="list-style-type: none"> ○ Compare Rocks (Easy) ○ Find the Mass of 50mL of Water (Average) ○ Find the Mass and Volume of Large Objects (Average) ○ Find the Mass and Volume of Salt (Challenging) • Unit 5, TE page 228A <ul style="list-style-type: none"> ○ Compare Temperatures of School Water Fountains (Easy) ○ Find Daily Temperatures (Easy) ○ Find How Water and Ice Affect the Temperature of Rice (Average) ○ Find the Temperature at Which Chocolate Melts (Challenging)
ASSESSMENTS/PROGRESS MONITORING	ASSESSMENT GUIDE
<ul style="list-style-type: none"> • Sum it Up <ul style="list-style-type: none"> ○ Unit 5, Lesson 1 - SE page 218, TE page 218 ○ Unit 5, Lesson 5 - SE page 238, TE page 238 ○ Unit 5, Lesson 6 - SE page 252, TE page 252 ○ Unit 6, Lesson 5 - SE page 312, TE page 312 • Brain Check and Apply Concepts <ul style="list-style-type: none"> ○ Unit 5, Lesson 1 - SE pages 219-220, TE pages 219-220 ○ Unit 5, Lesson 5 - SE pages 239-240, TE pages 239-240 ○ Unit 5, Lesson 6 - SE pages 253-254, TE pages 253-254 ○ Unit 6, Lesson 5 - SE pages 313-314, TE pages 313-314 • Unit 5 Review - TE pages 257A-260 • Unit 5 Short Option Performance Assessment - TE page 259 	<ul style="list-style-type: none"> • Lesson Quiz <ul style="list-style-type: none"> ○ Unit 5, Lesson 1 - page AG 50 ○ Unit 5, Lesson 2 - page AG 51 ○ Unit 5, Lesson 3 - page AG 52 ○ Unit 5, Lesson 4 - page AG 53 ○ Unit 5, Lesson 5 - page AG 54 ○ Unit 5, Lesson 6 - page AG 55 ○ Unit 6, Lesson 5 - page AG 67 • Unit 5 Test and Performance Task with Long Option Rubric - pages AG 56-AG 62
ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: ELA	
<p>Journeys</p> <ul style="list-style-type: none"> • Writing Connection - TE page 217 • Make Connections - TE page 220A <ul style="list-style-type: none"> ○ Writing Connection - Write a How-To Pamphlet (Average) • Writing Connection - TE page 223 • Writing Connection - TE page 237 • Make Connections - TE page 240A <ul style="list-style-type: none"> ○ Language Arts Connection - Design a Set of Flash Cards (Easy) • Writing Connection - TE page 250 • Make Connections - TE page 254A <ul style="list-style-type: none"> ○ Writing Connection - Write an Interview (Challenging) • Writing Connection - TE page 309 • Make Connections - TE page 314A <ul style="list-style-type: none"> ○ Language Arts Connection - Investigate “Hot” Expressions (Average) <p><i>Journeys Connections</i></p> <p>Lesson 27</p> <ul style="list-style-type: none"> • Whole Group - Anchor Text - The Power of Magnets (T67) • Whole Group - Photo Essay - Electromagnets & You (T71) 	

ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: MATH

Math Expressions

- Math Connection - TE page 213
- *Math Expressions Connections:*
 - Unit 3 Lesson 2: Customary Units of Liquid Volume MX TE pages 304-310
 - Unit 3 Lesson 3: Metric Units of Liquid Volume MX TE pages 314-318
- Make Connections - TE page 220A
- Math Connection - Make a Bar Graph (Average)
- *Math Expressions Connections:*
 - Unit 3 Lesson 11: Read and Create Pictographs and Bar Graphs MX TE pages 374-378
 - Unit 3 Lesson 12: Read and Create Bar Graphs with Multidigit Numbers MX TE pages 382-386
 - Unit 3 Lesson 14: Use Graphs to Solve Time and Measurement Word Problems MX TE pages 396-398
- Math Connection - TE page 235
- *Math Expressions Connections:*
 - Unit 1 Lesson 2: Multiplication as Equal Groups MX TE pages 13-15
 - Unit 1 Lesson 6: Building Fluency with 2s and 5s MX TE page 60
 - Unit 1 Lesson 9: Building Fluency with 2s, 5s, 9s, and 10s MX TE page 85
 - Unit 1 Lesson 14: Building Fluency with 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 85-86
 - Unit 1 Lesson 16: Solve and Create Word Problems MX TE pages 147-148
 - Unit 1 Lesson 18: Building Fluency with 0s, 1s, 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 159-160
 - Unit 2 Lesson 4: Write Word Problems and Equations MX TE pages 204-208
 - Unit 2 Lesson 7: Practice with 6s, 7s, and 8s MX TE page 230
 - Unit 3 Lesson 10: Solve Word Problems Involving Time MX TE pages 367-368
 - Unit 3 Lesson 14: Use Graphs to Solve Time and Measurement Word Problems MX TE pages 396-398
 - Unit 4 Lesson 3: Place Value in Word Problems MX TE pages 432-434
 - Unit 4 Lesson 4: Practice with Place Value MX TE page 439
 - Unit 4 Lesson 8: Discuss Addition Methods MX TE page 468
 - Unit 4 Lesson 9: The Grouping Concept in Addition MX TE page 478
 - Unit 4 Lesson 17: Solve Word Problems MX TE pages 538-542
 - Unit 5 Lesson 1: Addition and Subtraction Situations MX TE pages 556-561
 - Unit 5 Lesson 2: Word Problems with Unknown Addends or Unknown Factors MX TE pages 568-572
 - Unit 5 Lesson 3: Word Problems with Unknown Starts MX TE pages 576-580
 - Unit 5 Lesson 4: Comparison Problems MX TE pages 587-594
 - Unit 5 Lesson 5: Comparison Problems with Misleading Language MX TE pages 598-600
 - Unit 5 Lesson 6: Word Problems with Extra, Hidden, and Not Enough Information MX TE pages 604-608
- Math Connection - TE page 246
- *Math Expressions Connections:*
 - Unit 3 Lesson 4: Customary Units of Weight and Metric Units of Mass MX TE pages 322-328
 - Unit 3 Lesson 11: Read and Create Pictographs and Bar Graphs MX TE pages 372-378
 - Unit 3 Lesson 12: Read and Create Bar Graphs with Multidigit Numbers MX TE pages 382-386
 - Unit 3 Lesson 14: Use Graphs to Solve Time and Measurement Word Problems MX TE pages 396-398
- Math Connection - TE page 249
- *Math Expressions Connections:*
 - Unit 3 Lesson 11: Read and Create Pictographs and Bar Graphs MX TE pages 372-378
 - Unit 3 Lesson 12: Read and Create Bar Graphs with Multidigit Numbers MX TE pages 382-386
- Make Connections - TE page 254A
- Math Connection - Make a Bar Graph (Average)
- *Math Expressions Connections:*
 - Unit 7 Lesson 1: Understand Fractions MX TE pages 744-752
 - Unit 7 Lesson 2: Model Fractions MX TE pages 756-762
 - Unit 7 Lesson 3: Locate Fractions on the Number Line MX TE pages 766-774
 - Unit 7 Lesson 8: Problem Solving with Fractions MX TE pages 806-808
- Math Connection - TE page 305
- *Math Expressions Connections:*
 - Unit 4 Lesson 1: Make Place Value Drawings MX TE page 420
 - Unit 5 Lesson 4: Comparison Problems MX TE pages 584-586
- Make Connections - TE page 314A
- Math Connection - Calculate Temperature Change (Easy)

ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: MATH *cont.*Math Expressions *cont.*

- *Math Expressions Connections:*
 - Unit 2 Lesson 4: Write Word Problems and Equations MX TE pages 204-208
 - Unit 2 Lesson 7: Practice with 6s, 7s, and 8s MX TE page 230
 - Unit 3 Lesson 10: Solve Word Problems Involving Time MX TE pages 367-368
 - Unit 3 Lesson 14: Use Graphs to Solve Time and Measurement Word Problems MX TE pages 396-398
 - Unit 4 Lesson 3: Place Value in Word Problems MX TE pages 432-434
 - Unit 4 Lesson 4: Practice with Place Value MX TE page 439
 - Unit 4 Lesson 8: Discuss Addition Methods MX TE page 468
 - Unit 4 Lesson 9: The Grouping Concept in Addition MX TE page 478
 - Unit 4 Lesson 17: Solve Word Problems MX TE pages 538-542
 - Unit 5 Lesson 1: Addition and Subtraction Situations MX TE pages 556-561
 - Unit 5 Lesson 2: Word Problems with Unknown Addends or Unknown Factors MX TE pages 568-572
 - Unit 5 Lesson 3: Word Problems with Unknown Starts MX TE pages 576-580
 - Unit 5 Lesson 4: Comparison Problems MX TE pages 587-594
 - Unit 5 Lesson 5: Comparison Problems with Misleading Language MX TE pages 598-600
 - Unit 5 Lesson 6: Word Problems with Extra, Hidden, and Not Enough Information MX TE pages 604-608

SUGGESTED PACING	
<p>STRAND: PHYSICAL SCIENCE (PS) Topic: Matter and Forms of Energy This topic focuses on the relationship between matter and energy. Matter has specific properties and is found in all substances on Earth. Heat is a familiar form of energy that can change the states of matter. Content Statements:</p> <ul style="list-style-type: none"> Heat, electrical energy, light, sound and magnetic energy are forms of energy. There are many different forms of energy. Energy is the ability to cause motion or create change. 	
PRINT RESOURCES	DIGITAL RESOURCES
<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> Unit 5, Lesson 2 Unit 5, TE pages 221A-222A Unit 5, Inquiry Flip Chart page 31 Unit 6, All Lessons Unit 6, TE pages 303A-314A Unit 6, Inquiry Flip Chart page 42 Science and Engineering Leveled Readers: <ul style="list-style-type: none"> On-Level/Below Level: <i>What Are Some Forms of Energy?</i> Above Level: <i>Which Instrument Will She Play?</i> 	<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> Unit 5, Lesson 2 Digital Lesson with Virtual Lab Unit 6, Lesson 1 Digital Lesson Unit 6, Lesson 2 Digital Lesson Unit 6, Lesson 3 Digital Lesson with Virtual Lab Unit 6, Lesson 4 Digital Lesson Unit 6, Lesson 5 Digital Lesson Unit 6, Lesson 6 Digital Lesson with Virtual Lab
SCIENCE AND ACADEMIC VOCABULARY	
<p>Absorb, Electrical energy, Energy, Heat, Kinetic energy, Mechanical energy, Pitch, Potential energy, Reflect, Refract, Shadow, Sound, Temperature, Vibrate</p>	
DIFFERENTIATION	FIELD EXPERIENCE CONNECTIONS
<p>Basic (Extra Support)</p> <ul style="list-style-type: none"> Unit 5 Response to Intervention - TE page 205K Unit 6 Response to Intervention - TE page 261K Unit 6 TE pages 264, 268, 279, 281, 293, 296, 308, 311 <p>Advanced (Enrichment)</p> <ul style="list-style-type: none"> Unit 6 TE pages 264, 268, 279, 281, 293, 296, 308, 311 Unit 6 STEM - Flipchart page 40, TE pages 261F, 289-290B <p>English Language Learners</p> <ul style="list-style-type: none"> Unit 5 TE pages 205L-205M Unit 6 TE pages 261L-261M, 266, 269, 280, 282, 294, 297, 298, 306, 310 	
INQUIRY SKILLS	
<ul style="list-style-type: none"> Compare Draw Conclusions Gather and Record Data 	<ul style="list-style-type: none"> Infer Measure Observe Plan and Conduct a Simple Investigation Predict
HANDS-ON INQUIRY AND APPLICATION	
<ul style="list-style-type: none"> "How Can We Measure Magnetism?" (Flipchart page 31, TE pages 205E, 221A-222) "Energy in Motion" (Flipchart page 37, TE pages 261D, 263A) "Make It Move" (Flipchart page 37, TE pages 261D, 263A) "See Changes in Vibration" (Flipchart page 38, 261E, 275A) "Change the Sound" (Flipchart page 38, TE pages 261E, 275A) "How Are Sounds Changed?" (Flipchart page 39, TE 261F, 287A-288) "Explore How Light Travels" (Flipchart page 41, TE 261G, 291A) "Refraction" (Flipchart page 41, TE 261G, 291A) "Heat Race" (Flipchart page 42, TE pages 261H, 303A) "Where There's Light..." (Flipchart page 42, TE pages 261H, 303A) "Where Can Heat Come From?" (Flipchart page 43, TE pages 261I, 315A-316) 	

HANDS-ON INQUIRY AND APPLICATION <i>cont.</i>	
<p><i>Differentiated Inquiry</i></p> <ul style="list-style-type: none"> • Unit 5, TE page 222A <ul style="list-style-type: none"> ○ Check Your Results (Easy) ○ Test and Measure the Magnetism of an Electromagnet (Average) ○ Measure Magnetism a Different Way (Average) ○ Increase the Strength of an Electromagnet (Challenging) • Unit 5, TE page 288A <ul style="list-style-type: none"> ○ Play a Water Tune (Easy) ○ How Does Length Affect Pitch? (Easy) ○ Make a Straw Kazoo (Average) ○ Make a Guitar (Challenging) • Unit 6, TE page 316A <ul style="list-style-type: none"> ○ Test Sandpaper (Easy) ○ Make a Prediction (Easy) ○ Reduce Friction (Average) ○ Obtain Objective Results (Challenging) 	
ASSESSMENTS/PROGRESS MONITORING	ASSESSMENT GUIDE
<ul style="list-style-type: none"> • Sum it Up <ul style="list-style-type: none"> ○ Unit 6, Lesson 1 - SE page 270, TE page 270 ○ Unit 6, Lesson 2 - SE page 284, TE page 284 ○ Unit 6, Lesson 4 - SE page 300, TE page 300 ○ Unit 6, Lesson 5 - SE page 312, TE page 312 • Brain Check and Apply Concepts <ul style="list-style-type: none"> ○ Unit 6, Lesson 1 - SE pages 271-272, TE pages 271-272 ○ Unit 6, Lesson 2 - SE pages 285-286, TE pages 285-286 ○ Unit 6, Lesson 4 - SE pages 301-302, TE pages 301-302 ○ Unit 6, Lesson 5 - SE pages 313-314, TE pages 313-314 • Unit 6 Review - TE pages 317A-320 • Unit 6 Short Option Performance Assessment - TE page 319 	<ul style="list-style-type: none"> • Lesson Quiz <ul style="list-style-type: none"> ○ Unit 5, Lesson 2 - page AG 51 ○ Unit 6, Lesson 1 - page AG 63 ○ Unit 6, Lesson 2 - page AG 64 ○ Unit 6, Lesson 3 - page AG 65 ○ Unit 6, Lesson 4 - page AG 66 ○ Unit 6, Lesson 5 - page AG 67 ○ Unit 6, Lesson 6 - page AG 68 • Unit 6 Test and Performance Task with Long Option Rubric - pages AG 69-AG 75
ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: ELA	
<p><i>Journeys</i></p> <ul style="list-style-type: none"> • Writing Connection - TE page 267 • Make Connections - TE page 272A <ul style="list-style-type: none"> ○ Language Arts Connection - Write a Summary (Average) • Writing Connection - TE page 274 • Writing Connection - TE page 276 • Make Connections - TE page 286A <ul style="list-style-type: none"> ○ Language Arts Connection - Write an Eyewitness Account (Average) • Writing Connection - TE page 299 • Writing Connection - TE page 309 • Make Connections - TE page 314A <ul style="list-style-type: none"> ○ Language Arts Connection - Investigate "Hot" Expressions (Average) 	<p><i>Journeys Connections</i> Lesson 27</p> <ul style="list-style-type: none"> • Whole Group - Anchor Text - The Power of Magnets (T67) • Whole Group - Photo Essay - Electromagnets & You (T71)
ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: MATH	
<p><i>Math Expressions</i></p> <ul style="list-style-type: none"> • Math Connection - TE page 265 • <i>Math Expressions Connections:</i> <ul style="list-style-type: none"> ○ Unit 3 Lesson 11: Read and Create Pictographs and Bar Graphs MX TE pages 372-378 ○ Unit 3 Lesson 12: Read and Create Bar Graphs with Multidigit Numbers MX TE pages 382-386 • Make Connections - TE page 272A • Math Connection - Use Multiplication Properties (Easy) • <i>Math Expressions Connections:</i> <ul style="list-style-type: none"> ○ Unit 1 Lesson 3: Multiplication and Arrays MX TE pages 22, 27-30 ○ Unit 1 Lesson 6: Building Fluency with 2s and 5s MX TE page 59 ○ Unit 1 Lesson 15: Multiply and Divide with 1 and 0 MX TE page 137-138, 141 • Math Connection - TE page 278 • <i>Math Expressions Connections:</i> <ul style="list-style-type: none"> ○ Unit 1 Lesson 6: Building Fluency with 2s and 5s MX TE page 60 ○ Unit 1 Lesson 9: Building Fluency with 2s, 5s, 9s, and 10s MX TE page 85 ○ Unit 1 Lesson 14: Building Fluency with 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 85-86 ○ Unit 1 Lesson 16: Solve and Create Word Problems MX TE pages 147-148 ○ Unit 1 Lesson 18: Building Fluency with 0s, 1s, 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 159-160 	

ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: MATH *cont.*Math Expressions *cont.*

- *Math Expressions Connections: cont.*
 - Unit 2 Lesson 4: Write Word Problems and Equations MX TE pages 204-208
 - Unit 2 Lesson 7: Practice with 6s, 7s, and 8s MX TE page 230
 - Unit 4 Lesson 3: Place Value in Word Problems MX TE pages 432-434
 - Unit 4 Lesson 4: Practice with Place Value MX TE page 439
 - Unit 5 Lesson 2: Word Problems with Unknown Addends or Unknown Factors MX TE pages 568-572
- Make Connections - TE page 286A
- Math Connection - Graph Decibels (Challenging)
- *Math Expressions Connections:*
 - Unit 3 Lesson 11: Read and Create Pictographs and Bar Graphs MX TE pages 372-378
 - Unit 3 Lesson 12: Read and Create Bar Graphs with Multidigit Numbers MX TE pages 382-386
- Math Connection - TE page 329
- *Math Expressions Connections:*
 - Unit 1 Lesson 2: Multiplication as Equal Groups MX TE pages 13-15
 - Unit 1 Lesson 6: Building Fluency with 2s and 5s TE page 60
 - Unit 1 Lesson 9: Building Fluency with 2s, 5s, 9s, and 10s MX TE page 85
 - Unit 1 Lesson 14: Building Fluency with 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 85-86
 - Unit 1 Lesson 16: Solve and Create Word Problems MX TE pages 147-148
 - Unit 1 Lesson 18: Building Fluency with 0s, 1s, 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 159-160
 - Unit 2 Lesson 4: Write Word Problems and Equations MX TE pages 204-208
 - Unit 2 Lesson 7: Practice with 6s, 7s, and 8s MX TE page 230
 - Unit 3 Lesson 10: Solve Word Problems Involving Time MX TE pages 367-368
 - Unit 3 Lesson 14: Use Graphs to Solve Time and Measurement Word Problems MX TE pages 396-398
 - Unit 4 Lesson 3: Place Value in Word Problems MX TE pages 432-434
 - Unit 4 Lesson 4: Practice with Place Value MX TE page 439
 - Unit 4 Lesson 8: Discuss Addition Methods MX TE page 468
 - Unit 4 Lesson 9: The Grouping Concept in Addition MX TE page 478
 - Unit 4 Lesson 17: Solve Word Problems MX TE pages 538-542
 - Unit 5 Lesson 1: Addition and Subtraction Situations MX TE pages 556-561
 - Unit 5 Lesson 2: Word Problems with Unknown Addends or Unknown Factors MX TE pages 568-572
 - Unit 5 Lesson 3: Word Problems with Unknown Starts MX TE pages 576-580
 - Unit 5 Lesson 4: Comparison Problems MX TE pages 587-594
 - Unit 5 Lesson 5: Comparison Problems with Misleading Language MX TE pages 598-600
 - Unit 5 Lesson 6: Word Problems with Extra, Hidden, and Not Enough Information MX TE pages 604-608
- Make Connections - TE page 302A
- Math Connection - Calculate Apparent Size (Average)
- *Math Expressions Connections:*
 - Unit 1 Lesson 2: Multiplication as Equal Groups MX TE pages 13-15
 - Unit 1 Lesson 6: Building Fluency with 2s and 5s MX TE page 60
 - Unit 1 Lesson 9: Building Fluency with 2s, 5s, 9s, and 10s MX TE page 85
 - Unit 1 Lesson 14: Building Fluency with 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 85-86
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