

SUGGESTED PACING	
<p>STRAND: EARTH AND SPACE SCIENCE (ESS) Topic: Earth's Surface This topic focuses on the variety of processes that shape and reshape Earth's surface. Content Statements:</p> <ul style="list-style-type: none"> • The surface of Earth changes due to weathering. • Rocks change shape, size and/or form due to water or ice movement, freeze and thaw, wind, plant growth, gases in the air, pollution and catastrophic events such as earthquakes, mass wasting, flooding and volcanic activity. 	
PRINT RESOURCES	DIGITAL RESOURCES
<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> • Unit 3, Lessons 2 and 4 • Unit 3, TE pages 123A-138A, 157A-160 • Unit 3, Inquiry Flip Chart page 17-21 • Science and Engineering Leveled Readers: <ul style="list-style-type: none"> ○ On-Level/Below Level: <i>Earth's Changing Surface & Natural Resources</i> ○ Above Level: <i>Conserving Earth's Resources</i> 	<p><i>ScienceFusion</i></p> <ul style="list-style-type: none"> • Unit 3, Lesson 2 Digital Lesson with Virtual Lab • Unit 3, Lesson 4 Digital Lesson with Virtual Lab
SCIENCE AND ACADEMIC VOCABULARY	
<p>Deposition, Erosion, Sediment, Weathering</p>	
DIFFERENTIATION	FIELD EXPERIENCE CONNECTIONS
<p>Basic (Extra Support)</p> <ul style="list-style-type: none"> • Unit 3 Response to Intervention - TE page 107I • Unit 3 TE pages 127, 129, 133 <p>Advanced (Enrichment)</p> <ul style="list-style-type: none"> • Unit 3 TE pages 127, 129, 133 • Unit 3 STEM - Flipchart page 20, TE pages 107G, 155-156B <p>English Language Learners</p> <ul style="list-style-type: none"> • Unit 3 TE pages 107J-107K, 126, 130 	<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"> • Draw Conclusions • Experiment • Formulate or Use Models 	<ul style="list-style-type: none"> • Infer • Plan and Conduct a Simple Investigation • Predict • Use Models
HANDS-ON INQUIRY AND APPLICATION	
<ul style="list-style-type: none"> • "Grooving with Glaciers" (Flipchart page 18, TE pages 107E, 123A) • "Which Will Weather Faster?" (Flipchart page 18, TE pages 107E, 123A) • "How Does Water Change Earth's Surface?" (Flipchart page 21, TE pages 107G, 157A-160) 	<p><i>Differentiated Inquiry</i></p> <ul style="list-style-type: none"> • Unit 3, TE page 158A <ul style="list-style-type: none"> ○ Test Variables Affecting Erosion (Easy) ○ Model How Ice Can Break Rocks (Easy) ○ Model Soil Conservation Techniques (Average) • Modeling the Dust Bowl (Challenging)
ASSESSMENTS/PROGRESS MONITORING	ASSESSMENT GUIDE
<ul style="list-style-type: none"> • Sum it Up <ul style="list-style-type: none"> ○ Unit 3, Lesson 2 - SE page 134, TE page 134 • Brain Check and Apply Concepts <ul style="list-style-type: none"> ○ Unit 3, Lesson 2 - SE pages 135-138, TE pages 135-138 	<ul style="list-style-type: none"> • Lesson Quiz <ul style="list-style-type: none"> ○ Unit 3, Lesson 2 - page AG 26 ○ Unit 3, Lesson 4 - page AG 28

ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: ELA

Journeys

- Writing Connection - TE page 125
- Writing Connection - TE page 131
- Make Connections - TE page 138A
 - Writing Connection - The Story of Sediment (Challenging)
- Writing Connection - TE page 159

Journeys Connections:

- Lesson 6, Whole Group - Read Aloud - The Tunguska Event (T13)
- Lesson 11, Whole Group - Anchor Text - Hurricanes: Earth's Mightiest Storms (T27)
- Lesson 11, Whole Group - Newspaper Article - Recovering from Katrina (T39)
- Lesson 11, Small Group - Vocabulary Reader - Tornadoes (T63)
- Lesson 11, Small Group - On Level Reader - Tsunami (T67)
- Lesson 11, Small Group - ELL Reader - The Big, Dangerous Wave (T69)
- Lesson 12, Whole Group - Anchor Text - The Earth Dragon Awakes (T103)
- Lesson 12, Whole Group - Informational Text - Twisters (T113)
- Lesson 24, Small Group - Vocabulary Reader - Dangerous Waves (T293)
- Lesson 28, Whole Group - Photo Essay - Making the Most from Trash (T117)

ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: MATH

Math Expressions

- Math Connection - TE page 128
- Math Expressions Connections:
 - Unit 5 Lesson 1: Measuring Length MX TE pages 451-458
 - Unit 5 Lesson 4: Customary Measures of Length MX TE pages 475-480
 - Unit 7 Lesson 10: Compare Decimals to Hundredths MX TE pages 673-682
- Math Connection - TE page 132
- Math Expressions Connections:
 - Unit 5 Lesson 1: Measuring Length MX TE pages 451-458
 - Unit 5 Lesson 3: Units of Time MX TE pages 467-474
 - Unit 5 Lesson 4: Customary Measures of Length MX TE pages 475-480
 - Unit 5 Lesson 7: Solve Measurement Problems MX TE pages 497-502
 - Unit 5 Lesson 8: Focus on Mathematical Practices MX TE pages 503-508
- Make Connections - TE page 138A
- Math Connection - Solve a Word Problem (Average)
- Math Expressions Connections:
 - Unit 1 Lesson 7: Add Greater Numbers MX TE pages 55-60
 - Unit 1 Lesson 11: Subtract Greater Numbers MX TE pages 83-90
 - Unit 1 Lesson 12: Practice Addition and Subtraction MX TE pages 91-96
 - Unit 1 Lesson 13: Problem Solving with Greater Numbers MX TE pages 97-104
 - Unit 1 Lesson 14: Focus on Mathematical Practices MX TE pages 105-110
 - Unit 2 Lesson 4: Model One-Digit by Two-Digit Multiplication MX TE pages 139-140
 - Unit 2 Lesson 10: One-Digit by Three-Digit Multiplication MX TE page 186
 - Unit 2 Lesson 11: Multistep Word Problems MX TE pages 189-198
 - Unit 2 Lesson 15: Practice Multiplication MX TE pages 223-230
 - Unit 3 Lesson 3: Discuss 2-Digit and 4-Digit Quotients MX TE pages 285-294
 - Unit 3 Lesson 4: Digit-by-Digit Method MX TE pages 295-302
 - Unit 3 Lesson 6: Divide by Any Method MX TE pages 313-318
 - Unit 3 Lesson 10: Mixed Problem Solving MX TE pages 339-344
 - Unit 3 Lesson 11: Focus on Mathematical Practices MX TE pages 345-350
 - Unit 4 Lesson 8: Solve Multistep Problems MX TE page 414