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| **SUGGESTED PACING** | | | | |
| **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:**   * Some of Earth’s resources are limited. * Some of Earth’s resources become limited due to overuse and/or contamination. Reducing resource use, decreasing waste and/or pollution, recycling and reusing can help conserve these resources. | | | | |
| **PRINT RESOURCES** | | **DIGITAL RESOURCES** | | |
| *ScienceFusion*   * 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:   + On-Level/Below Level: *What Are Natural Resources?*   + Above Level: *Let’s Recycle and Reuse!* | | *ScienceFusion*   * 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** | | | | |
| Clay, Conservation, Fossil Fuel, Humus, Natural Resource, Nonrenewable Resources, Nutrients, Pollution, Renewable Resources, Sand, Silt, Soil | | | | |
| **DIFFERENTIATION** | | **FIELD EXPERIENCE CONNECTIONS** | | |
| Basic (Extra Support)   * Unit 3 Response to Intervention - TE page 89K * Unit 3 TE pages 97, 99, 101, 125, 127   Advanced (Enrichment)   * Unit 3 TE pages 97, 99, 101, 125, 127 * Unit 3 STEM - Flipchart page 19, TE pages 89F, 107-108B   English Language Learners   * Unit 3 TE pages 89L-89M, 93, 95, 96, 100, 122, 124, 128, 131 | | 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](mailto:education@greaterclevelandaquarium.com) | | |
| **INQUIRY SKILLS** | | | | |
| * Classify/Order * Communicate * Compare | * Draw Conclusions * Gather, Record, Display, or Interpret Data * Infer | | | * Observe * Plan and Conduct a Simple Investigation * Predict |
| **HANDS-ON INQUIRY AND APPLICATION** | | | | |
| * “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) | | *Differentiated Inquiry*   * Unit 5, TE page 106A   + How Much Paper Do You Use? (Easy)   + Marketing Campaign (Average)   + Analyze Data (Average) * Design a Recycling Program (Challenging) | | |
| **ASSESSMENTS/PROGRESS MONITORING** | | | **ASSESSMENT GUIDE** | |
| * Sum it Up   + 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   + 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 | | | * Lesson Quiz   + 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   + 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 | | | | |
| **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   + 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:*   + 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 | | | | |