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| **SUGGESTED PACING** | | | | |
| **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:**   * 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** | | |
| *ScienceFusion*   * Unit 5, All Lessons * Unit 5, TE pages 207A-260A * Unit 5, Inquiry Flip Chart page 30-35 * Science and Engineering Leveled Readers:   + On-Level/Below Level: *How Can You Describe Matter??*   + Above Level: *Engineering Materials* * Unit 6, TE pages 303A-314A * Unit 6, Inquiry Flip Chart page 42 | | *ScienceFusion*   * 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** | | | | |
| Chemical Change, Condensation, Dissolve, Evaporation, Gas, Liquid, Mass, Matter, Mixture, Physical Change, Physical Property, Solid, Solution, Temperature, Volume | | | | |
| **DIFFERENTIATION** | | **FIELD EXPERIENCE CONNECTIONS** | | |
| Basic (Extra Support)   * 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   Advanced (Enrichment)   * 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   English Language Learners   * 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** | | | | |
| * Classify * Communicate * Compare * Draw Conclusions * Gather and Record Data | * Hypothesize * Identify and Control Variables * Infer * Measure | | | * Observe * Plan and Conduct a Simple Investigation * Predict * Use Numbers |
| **HANDS-ON INQUIRY AND APPLICATION** | | | | |
| * “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) | | *Differentiated Inquiry*   * Unit 5, TE page 222A   + 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   + 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   + 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** | |
| * Sum it Up   + 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   + 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 | | | * Lesson Quiz   + 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** | | | | |
| Journeys   * Writing Connection - TE page 217 * Make Connections - TE page 220A   + Writing Connection - Write a How-To Pamphlet (Average) * Writing Connection - TE page 223 * Writing Connection - TE page 237 * Make Connections - TE page 240A   + Language Arts Connection - Design a Set of Flash Cards (Easy) * Writing Connection - TE page 250 * Make Connections - TE page 254A   + Writing Connection - Write an Interview (Challenging) * Writing Connection - TE page 309 * Make Connections - TE page 314A   + Language Arts Connection - Investigate “Hot” Expressions (Average)   *Journeys Connections*  Lesson 27   * 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 | | | | |