**6th Grade Scope and Sequence for Mathworks *Math Explorations 1***

**(45-50 minutes per class)**

**1st 6 Weeks**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter** | **Number of Days** | **TEKS** | **Section** | **Concept** |
| **1**  **Exploring Integers** | 1 | 6.1C, 6.1E, 6.1F, 6.2A, 6.2C | 1.1 | Building Number Lines |
| ½ | 6.1D, 6,1G 6.2C, 6.2D | 1.2 | Less Than and Greater Than |
| ½ | 6.1B, 6.1G 6.2B | 1.4 | Distance Between Points |
| 1 | 6.2C, 6.2D | 1.3 | Applications of the Number Line |
| 1 | 6.1D, 6.2B, 6.3C, 6.3D, 6.7D | 1.5 | Addition of Integers |
| 1 | 6.3C, 6.3D | 1.6 | Subtraction of Integers |
| 1 | 6.7C | 1.7 | Variables and Expressions |
| 1 | 6.11A | 1.8 | Graphing on the Coordinate System |
| 1 |  | Activities | Chapter 1 activities in TE |
| 1 |  | Assess | Quiz |
| 1 |  | Review | Review Problems and Challenge Problems |
| 1 |  | Assess | Test |
| **Sub-Total** | **11** |  |  |  |
| **2**  **Multiplying and Dividing** | 1 | 6.1C, 6.1G, 6.3C, 6.3D | 2.1 | Skip Counting with Integers |
| 1 | 6.3C, 6.3D 6.7C, 6.7D | 2.2 | Area Model for Multiplication |
| 1 | 6.3C, 6.3D | 2.3 | Linear Model for Division |
| 1 | 6.1G, 6.3C | 2.4 | The Division Algorithm |
| 1 | 6.1C, 6.3C, 6.3D | 2.5 | Long Division |
| 1 |  | Activities | Chapter 2 activities in TE |
| 1 |  | Review | Review Problems and Challenge Problems |
| 2 |  | Assess | Quiz and Test |
| **Sub-Total** | **9** |  |  |  |
| **Total** | **20** |  |  |  |

**2nd 6 Weeks**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter** | **Number of Days** | **TEKS** | **Section** | **Concept** |
| **3**  **Factors and Multiples** | 1 | 6.1A, 6.1C 6.1F, 6.1G | 3.1 | Factors, Multiples, Primes, and Composites |
| 1 | 6.1C, 6.7A | 3.2 | Exponents and Order of Operations |
| 1 | 6.7A | 3.3 | Prime Factorization |
| 1 | 6.1A, 6.1D 6.7A | 3.4 | Common Factors and the GCF |
| 1 | 6.1A, 6.7A | 3.5 | Common Multiples and the LCM |
| 1 |  | Activities | Chapter 3 activities in TE |
| 1 |  | Review | Review Problems and Challenge Problems |
| 2 |  | Assess | Quiz and Test |
| **Sub-Total** | **9** |  |  |  |
| **4**  **Fractions** | 1 | 6.4F | 4.1 | Models for Fractions |
| 1 | 6.1G, 6.2C, 6.2D, 6.4F | 4.2 | Comparing and Ordering Fractions |
| 1 | 6.2A, 6.2C 6.2D | 4.3 | Unit, Mixed, Proper and Improper Fractions |
| 1 | 7.3A, 7.3B | 4.4 | Additions and Subtraction of Fractions (Optional: Use for accelerated classes.) |
| 1 | 7.3A, 7.3B | 4.5 | Common Denominators and Mixed Fractions (Optional: Use for accelerated classes.) |
| 1 |  | Activities | Chapter 4 activities in TE |
| 1 |  | Review | Review Problems and Challenge Problems |
| 2 |  | Assess | Quiz and Test |
| **Sub-Total** | **9** |  |  |  |
| **5**  **Decimal and Percent Representations** | 1 | 6.2C, 6.2D | 5.1 | Constructing Decimals |
| 1 | 6.3E, 6.11A | 5.2 | Operating with Decimals |
| 1 | 6.2C, 6.2D 6.2E, 6.3E, 6.4F, 6.4G, 6.5C | 5.3 | Numbers as Decimals and Fractions |
| 1 | 6.1A, 6.2C 6.2D, 6.2E 6.3E, 6.4E 6.4F, 6.4G, 6.5B, 6.5C | 5.4 | Fractions, Decimals, and Percents |
| 1 |  | Activities | Chapter 5 activities in TE |
| 1 |  | Review | Review Problems and Challenge Problems |
| 2 |  | Assess | Quiz and Test |
| **Sub-Total** | **8** |  |  |  |
| **Total** | **26** |  |  |  |

**3rd 6 Weeks**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter** | **Number of Days** | **TEKS** | **Section** | **Concept** |
| **6**  **Equations, Inequalities and Functions** | 1 | 6.4A, 6.6B 6.6C | 6.1 | Patterns and Sequences |
| 2 | 6.1D, 6.4A 6.6C, 6.7B 6.9A, 6.9C 6.10A, 6.10B | 6.2 | Equations |
| 1 | 6.1D, 6.9A 6.9B, 6.9C 6.10A | 6.3 | Equations and Inequalities on Number Lines |
| 2 | 6.1D, 6.1F 6.4A, 6.6A 6.6B, 6.6C 6.9A, 6.11A | 6.4 | Functions |
| 1 |  | Activities | Chapter 6 Activities in TE |
| 1 |  | Review | Review Problems and Challenge Problems |
| 2 |  | Assess | Quiz and Test |
| **Sub-Total** | **10** |  |  |  |
| **7**  **Rates, Ratios, and Proportions** | 2 | 6.1D, 6.3B 6.3E | 7.1 | Multiplying Fractions |
| 2 | 6.1D, 6.1G 6.2E, 6.3A 6.3E | 7.2 | Divisions of Fractions |
| 2 | 6.4B, 6.4C 6.4D, 6.4E 6.4F, 6.5A 6.5B | 7.3 | Rates and Ratios |
| 2 | 6.4A, 6.4B 6.4C, 6.4D 6.4E, 6.4H 6.5A | 7.4 | Proportions |
| 1 |  | Activities | Chapter 7 Activities in TE |
| 1 |  | Review | Review Problems and Challenge Problems |
| 2 |  | Assess | Quiz and Test |
| **Sub-Total** | **12** |  |  |  |
| **Total** | **22** |  |  |  |

**4th 6 Weeks**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter** | **Number of Days** | **TEKS** | **Section** | **Concept** |
| **8**  **Measurement** | 1 | 6.1F, 6.4H | 8.1 | Length |
| 1 | 6.4H | 8.2 | Capacity and Volume |
| 1 | 6.4H | 8.3 | Weight and Mass |
| 1 | 6.4H | 8.4 | Time and Temperature |
| 1 |  | Activities | Chapter 8 activities in TE |
| 1 |  | Review | Review Problems and Challenge Problems |
| 2 |  | Assess | Quiz and Test |
| **Sub-Total** | **8** |  |  |  |
| **9**  **Geometry** | 1 | 6.1C, 6.1D 6.1E, 6.10A, 6.10B | 9.1 | Measuring Angles |
| 1 | 6.8A, 6.10A | 9.2 | Triangles |
| 2 | 6.1F, 6.1G | 9.3 | Quadrilaterals and Other Polygons |
| 2 | 6.8B, 6.8C 6.8D | 9.4 | Perimeter and Area |
| 2 | 7.5B, 7.8C, 7.9B | 9.5 | Circles  (Optional: Use for accelerated classes.) |
| 2 | 6.8C, 6.8D | 9.6 | Three-Dimensional Shapes |
| 1 |  | Activities | Chapter 9 activities in TE |
| 1 |  | Review | Review Problems and Challenge Problems |
| 2 |  | Assess | Quiz and Test |
| **Sub-Total** | **14** |  |  |  |
| **Total** | **22** |  |  |  |

**5th 6th Weeks**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter** | **Number of Days** | **TEKS** | **Section** | **Concept** |
| **10**  **Data Analysis** | 3 | 6.1B, 6.1D 6.1E, 6.12A, 6.12B, 6.12C, 6.12D, 6.13A, 6.13B | 10.1 | Measures of Central Tendency |
| 2 | 6.1C, 6.1D 6.1E, 6.5B 6.12A, 6.12B, 6.12C, 6.12D, 6.13A, | 10.2 | Graphing Data |
| 2 | 7.6A, 7.6B 7.6C, 7.6D 7.6E,7.6H, 7.6I | 10.3 | Probability  (Optional: Use for accelerated classes.) |
| 2 | 6.1D,  7.6A, 7.6B 7.6C, 7.6D 7.6H, 7.6I | 10.4 | Rule of Product and Rule of Sum  (Optional: Use for accelerated classes.) |
| 2 |  | Activities | Chapter 10 activities in TE |
| 1 |  | Review | Review Problems and Challenge Problems |
| 2 |  | Assess | Quiz and Test |
| **Sub-Total** | **14** |  |  |  |
| **11**  **Math of Finance** | 2 | 6.1A, 6.14A, 6.14B, 6.14C | 11.1 | Types of Charge Cards |
| 2 | 6.1A, 6.14D, 6.14E, 6.14F | 11.2 | Credit Reports |
| 2 | 6.14G, 6.14H | 11.3 | Going to College |
| 2 |  | Assess | Quiz and Test |
| **Sub-Total** | **8** |  |  |  |
| **Total** | **22** |  |  |  |

Concepts have been divided into a 6-week timeline allowing time for additional activities such as back-to-school rules and procedures, benchmarks, state testing, and final exams.