*1 Day Pacing = 45 min. Session

# Module 1: Composing and Decomposing

## Topic 1: Factors and Multiples

| Lesson # | Lesson Title | Lesson Subtitle | Highlights | TEKS | Pacing* |
|---|---|---|---|---|---|
| ELPS: 1.A, 1.C, 1.E, 1.F, 1.G, 2.C, 2.E, 2.I, 3.D, 3.E, 4.B, 4.C, 5.B, 5.F, 5.G | | | | | |
| 1 | Taking Apart Numbers and Shapes | Writing Equivalent Expressions Using the Distributive Property | Students use the Distributive Property to decompose and compose numerical expressions to create equivalent representations. | 6.7D | 1 |
| 2 | Searching for Common Ground | Identifying Common Factors and Common Multiples | Students use prime factorization and tables to organize factors and multiples and are introduced to least common multiple (LCM) and greatest common factor (GCF). | 6.7A | 2 |
| 3 | Composing and Decomposing Numbers | Least Common Multiple and Greatest Common Factor | Students use the greatest common factor (GCF) and least common multiple (LCM) to solve real-world and mathematical problems. | 6.7A 6.7D | 1 |
| MATHia | | | | | 1 |
| End of Topic Assessment | | | | | 1 |

| Aligned MATHia Units & Workspaces | | | |
|---|---|---|---|
| **MATHia Unit** | **MATHia Workspace** | **Highlights** | **TEKS** |
| **Topic 1: Factors and Multiples** | | | |
| Writing Equivalent Expressions Using the Distributive Property | Commutative and Associative Properties | Students follow worked examples to rewrite expressions using the commutative and associative properties of addition and multiplication. | 6.7D |
| | Exploring the Distributive Property with Numeric Expressions | Students explore modeling the Distributive Property of multiplication over addition with numeric expressions using an interactive grid. | 6.7D |
| | Using the Distributive Property with Numeric Expressions | Students practice applying different distributive properties (multiplication over addition, division over addition) to rewrite numeric expressions and calculate efficiently. | 6.7D |
| Common Factors and Common Multiples | Prime Factorization | Students create a factor tree to show the prime factorization of a number less than 100. They use the factor tree to evaluate the validity of statements about the multiplicative structure of the number. | 6.7A |
| | Determining the LCM or GCF of Two Numbers | Students use given factor trees to determine the least common multiple of two numbers less than or equal to 12 or the greatest common factor of two numbers less than or equal to 100. For the LCM, students identify the shared and non-shared prime factors and calculate the product. For the GCM, students identify the shared prime factors and calculate the product. They then use the non-shared prime factors to determine the quotient of each number divided by the GCF. | 6.7A |

| Aligned MATHia Units & Workspaces | | | |
|---|---|---|---|
| **MATHia Unit** | **MATHia Workspace** | **Highlights** | **TEKS** |
| Least Common Multiple and Greatest Common Factor | Using the GCF to Rewrite the Sum of Two Numbers | Students use an Explore Tool to think about the decomposition of the sum of two numbers into a product of a factor and a sum. They review the Distributive Property and GCF and analyze worked examples that show them how to rewrite the sum of two whole numbers using the Distributive Property and any common factor, and using the Distributive Property and the GCF. Students rewrite the sum of two whole numbers using the Distributive Property and the GCF. | 6.7D |