Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| Chapter 1 | Numerical Expressions and Factors |
| Date: | Lesson 1.1 Whole Number Operations |
| Essential Question | How do you know which operation to choose when solving a real life problem? |
| Review |  |
| Vocab Chart | |  |  |  | | --- | --- | --- | | Addition |  |  | | Subtraction |  |  | | Multiplication |  |  | | Division |  |  | |
| Vocabulary | Write each number in the division problem shown next to the correct term.  Divisor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 26  Dividend: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 34 884  Quotient: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Practice |  |
| Practice |  |
| Geometry Connection | What is the perimeter and area of the shape below?  Perimeter: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  5 in.  Area: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    7 in. |

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| Chapter 1 | Numerical Expressions and Factors |
| Date: | Lesson 1.2 Powers and Exponents |
| Essential Question | How can you use repeated factors in real-life situations? |
| Vocabulary | |  |  |  | | --- | --- | --- | | Word | Definition | Example | |  | a product of repeated factors |  | |  | repeated factor |  | |  | the number of times the base is multiplied |  | |
| Practice |  |
| Practice |  |
| Practice | 7. John Deere makes its toy tractors identical to real tractors. The smallest tractor shown is 3 inches long. If each toy tractor is three times larger than the previous toy tractor, how long is the largest toy tractor? Write a power to represent the length of the largest toy tractor. Then find the length of the largest toy tractor. |
| Vocabulary and Concept Check | 8. How are exponents and powers different?  9. Which one does not belong with the others? Explain.  a) 24 = 2 x 2 x 2 x 2  b) 3 + 3 + 3 + 3 = 3(4)  c) 32 = 3 x 3  d) |

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| Chapter 1 | Numerical Expressions and Factors |
| Date: | Lesson 1.3 Order of Operations |
| Essential Question | In what order do expressions need to be solved? |
| Vocabulary | |  |  |  | | --- | --- | --- | | Word | Definition | Example | |  | expression that only contains numbers | 3 x 5 + 6 | |  | find the value, or answer | 3 x 5 + 6  15 + 6  = 21 | |  | 1) parentheses  2) exponents  3) multiply or divide  **left to right**  4) add or subtract  **left to right** | Please  Excuse  My Dear  Aunt Sally  PEMDAS | |
| Symbols |  |
| Practice |  |
| Practice |  |

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| Chapter 1 | Numerical Expressions and Factors |
| Date: | Lesson 1.4 Prime Factorization |
| Essential Question | Without dividing, how can you tell when a number is divisible by another number? |
| Vocab | Factor pairs are 2 numbers that are multiplied together to get a product.  Example: |
| Practice |  |
| Vocabulary | |  |  |  | | --- | --- | --- | | Word | Definition | Example | |  | a number that only has the factors 1 and itself | 13  1 x 13 = 13 | |  | A number that has more factors than 1 and itself | 15  1 x 15 and 3 x 5  = 15 | |  | A strategy to find the prime factorization of a number | 18  2 x 9  3 x 3 | |  | Writing a composite number as a product of prime numbers | 2 x 3 x 3  2 x 32 | |
| Practice | Write the prime factorization for each number. Use a factor tree to help.  5) 20 6) 88 7) 90 |
| Practice | Find the number represented by each prime factorization.  8) 23 x 32 x 5 9) 2 x 33 |

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| Chapter 1 | Numerical Expressions and Factors |
| Date: | Lesson 1.5 Greatest Common Factor |
| Essential Question | How can you find the greatest common factor of two numbers? |
| Vocabulary | |  |  | | --- | --- | | Word | Definition | |  | factors that are shared by two or more numbers | |  | the greatest, or biggest, of the common factors | |
| **Strategy 1** | Make a list of factor pairs. |
| Practice | Find the GCF of the numbers using lists of factors.  1) 8, 36 2) 18, 72 |
| Strategy 2 | Use prime factorization by making a factor tree. |
| Practice | Find the GCF of the numbers using prime factorization.  3) 20, 45 4) 32, 90 |
| Practice | 5) You are making identical flower arrangements to put on tables at a wedding. You have 84 red roses and 60 white roses. What is the greatest number of flower arrangements you can make? |

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| Chapter 1 | Numerical Expressions and Factors |
| Date: | Lesson 1.6 Least Common Multiple |
| Essential Question | How can you find the least common multiple of two numbers? |
| Vocabulary | |  |  | | --- | --- | | Word | Definition | |  | multiples that two numbers have in common | |  | the least, or smallest, multiples that two numbers have | |
| Strategy 1 | Make a list of multiples. Skip count to find the multiples. |
| Practice | Find the LCM of the numbers using lists of multiples.  1) 3, 8 |
| 2) 9, 12 |
| 3) 6, 10 |
| Strategy 2 | Use prime factorization by making a factor tree. |
| Practice | Find the LCM of the numbers using prime factorizations.  4) 14, 18 5) 28, 36 |
| Practice | 6) Trains on two different subway lines have just arrived at the station. Line A has trains that arrive every 12 minutes. Line B has trains that arrive every 15 minutes. In how many minutes will trains on Line A and Line B arrive at the station at the same time? |

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| Chapter 1 | Numerical Expressions and Factors |
| Date: | Lesson 1.6 ext Adding and Subtracting Fractions |
| Essential Question | How can you add or subtract fractions? |
| Vocab |  |
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