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 |

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| Addition |  |  |
| Subtraction |  |  |
| Multiplication |  |  |
| Division |  |  |

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| Vocabulary | Write each number in the division problem shown next to the correct term.Divisor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 26Dividend: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 34 884Quotient: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 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  |

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| 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) $5 ∙5 ∙5= 5^{3}$ |

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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  |

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| 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) parentheses2) exponents3) multiply or divide **left to right**4) add or subtract **left to right**  | PleaseExcuseMy DearAunt SallyPEMDAS |

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| 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 | 131 x 13 = 13 |
|  | A number that has more factors than 1 and itself | 151 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 32 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  |

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| Word | Definition |
|  | factors that are shared by two or more numbers |
|  | the greatest, or biggest, of the common factors |

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| **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  |

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| Word | Definition |
|  | multiples that two numbers have in common |
|  | the least, or smallest, multiples that two numbers have |

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| 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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