

## 6<sup>th</sup> Grade Mid-Term Review

### Chapter 1:

- 1.1 – Place Value System
  - Number in word form
  - Number in expanded form
  - Number in standard form
  - Place of underline digit
  - Value of underline digit
  - Place Value Chart
- 1.2 – Compare and Order Numbers
  - Order from least to greatest
  - Order from greatest to least
  - Understand if a number is greater than ( $>$ ), less than ( $<$ ), or equal to ( $=$ ) when reading from left to right
- 1.3 – Problem Solving
  - Know how to solve a problem when given a chart with data
- 1.4 – Add and Subtract Whole Numbers and Decimals
  - Understand when adding and subtracting decimals, the decimal point lines up in the sum or difference
  - Understand when adding and subtracting, all digits are place in proper place value position when adding and subtracting
  - Know when to add 0s when subtracting and minuend (top number) has fewer numbers to the right of the decimal point than the subtrahend (bottom number)
- 1.5 – Estimate Sums and Differences
  - Understand how to round a number to the nearest place value given
  - Know the 4 steps to rounding
    - **Step 1:** Underline the number in question. Ask the question: Change or not?
    - **Step 2:** Circle the number immediate to the right of the underline number.
    - **Step 3:** If the circled number is  $>$  or  $=$  to 5, then
      - Change the circled number and all numbers to right to 0
      - Increase the underline number by 1
    - **Step 4:** If the circled number is  $<$  5, then
      - Change the circled number and all numbers to the right to 0
      - Leave the underlined number as is
- 1.8 – Properties of Addition
  - Know the three properties of addition and be able to recognize when it is being used from one side of an equation to another
    - Commutative
    - Associative
    - Identity

- Identify the missing number from one side of the equation to another
  - Be able to provide an example of each property
- ✓ Chapter 1 Material to Review:
- Chapter 1 Quizzes and Test
  - Check Your Progress A pg. 14
  - Check Your Progress B pg. 32
  - Extra Practice pp. 33-35
  - Chapter Study Guide & Chapter Test pp. 36-38
  - All Homework assigned in Chapter 1
  - Math Vocabulary Words

## Chapter 2:

- 2.1 – Multiplication Patterns
  - Multiplying numbers who factor(s) ends in 0's (e.g. 700 x 500)
- 2.2 – Multiply Whole Numbers
  - Multiply using traditional method
  - Multiply using distributive method
- 2.3 – Exponents
  - Know how convert from expanded form to exponent form
  - Know how to convert from exponent form to expanded form
  - Know how to evaluate an exponent
- 2.4 – Estimate Products
  - Round products first, then multiply
  - Know the three general rules for rounding products:
    - **Small numbers:** round to nearest ten
    - **Large numbers:** round to nearest hundred or thousand
    - **Decimals:** round to nearest whole number
- 2.6 – Multiply Decimals
  - Multiply using traditional method
  - Multiply using distributive method
- 2.7 – Properties of Multiplication
  - Know the five properties of multiplication and be able to recognize when it is being used from one side of an equation to another
    - Commutative
    - Associative
    - Identity
    - Zero
    - Distributive
  - Identify the missing number from one side of the equation to another
  - Be able to provide an example of each property
- 2.8 – Divide Whole Numbers
  - Divide using traditional method

- 2.9 – Divide Decimals by Whole Numbers
    - Divide using traditional method
  - 2.12 – Multiplication and Division Patterns
    - Know patterns of dividing when divisor is multiple of 10 (move decimal point to left same amount of spaces as zeros in divisor), add zeros (to left of original number and to right of decimal point) when necessary. (e.g.  $12.34 \div 10000 = .001234$  => decimal point is moved to left four spaces, had to add two 0s between the decimal point and to the left of 1234 )
    - Know patterns of multiplying when factor(s) are multiple of 10 (move decimal point to right same amount of spaces as zeros in factors), add zeros (at end of number) when necessary (e.g.  $12.34 \times 10000 = 123400$  => decimal point is moved to right four spaces, had to add two 0s at the end of number 1234)
  - 2.13 – Divide Decimals by Decimals
    - Move decimal point in divisor as many spaces to right to make a whole number, do the same to dividend as many places as was moved for the divisor
    - Divide using traditional method
  - 2.14 – Estimating Quotients
    - Round divisor and dividend as close to the original number where the divisor will go evenly into the dividend. When using zeros, put in fraction form and cross off common zeros.
- ✓ Chapter 2 Material to Review:
- Chapter 1 Quizzes and Test
  - Check Your Progress A pg. 66
  - Check Your Progress B pg.94
  - Extra Practice pp. 95-97
  - Chapter Study Guide & Chapter Test pp. 98-100
  - All Homework assigned in Chapter 2
  - Math Vocabulary Words

### Chapter 3:

- 3.1 – Collect, Organize, and Display Data
  - Recognize and understand how to set up frequency tables
  - Recognize and understand how to set up line plots
  - Recognize and understand how to set up pictographs
- 3.2 – Range, Mean, Median, and Mode
  - Know what is a range, mean, median, and mode
  - Know how to find the range, mean, median, and mode of a given set of data
- 3.3 - Appropriate Average
  - Know how to decide whether the mean, median, or mode is the most appropriate average to use to describe a set of data

- 3.4 – Bar Graphs and Histograms
    - Recognize and understand how to set up bar graphs and histograms
    - Know the difference between a bar graph and a histogram
  - 3.5 – Line Graphs
    - Recognize and understand how to set up line graphs
    - Know the difference between a line plot and a line graph
  - 3.7 – Stem-and-Leaf Plots
    - Recognize and understand how to set up line graphs
- ✓ Chapter 3 Material to Review:
- Quiz 1
  - Check Your Progress A pg. 130
  - Check Your Progress B pg. 148 (on material covered in class)
  - Extra Practice pp. 149-151 (on material covered in class)
  - Chapter Study Guide & Chapter Test pp. 152-154 (on material covered in class)
  - All Homework assigned in Chapter 3 (January calendar)
  - Math Vocabulary Words

**Chapter 4:**

- 4.1 – Divisibility
  - Understand how to apply the divisibility rules to a given number
  - Identify even and odd numbers
- 4.2 – Prime and Composite Numbers
  - Know what is a Prime Number
  - Know what is a Composite Number
  - Write Prime factorization (using factor tree) of composite number, use exponents when necessary
- 4.3 – Greatest Common Factors and Least Common Multiples
  - Know how to find the GCF between two numbers
  - Know how to find the LCM between two numbers
- 4.4 – Understanding Fractions
  - Know how to write a fraction given a divided figure
  - Know how to write equivalent fractions
  - Know how to solve word problems containing fractions
- 4.5 – Problem Solving
  - Know how to solve word problems with extra or missing information
- 4.6 – Simplify Fractions
  - Know how to simplify fractions

✓ Chapter 4 Material to Review:

- Quiz 2
- Check Your Progress A pg. 180
- Extra Practice pp. 199-200 (on material covered in class)
- Chapter Study Guide & Chapter Test pp. 202-204 (on material covered in class)
- All Homework assigned in Chapter 4 (January calendar)
- Math Vocabulary Words (up to Jan. 15)