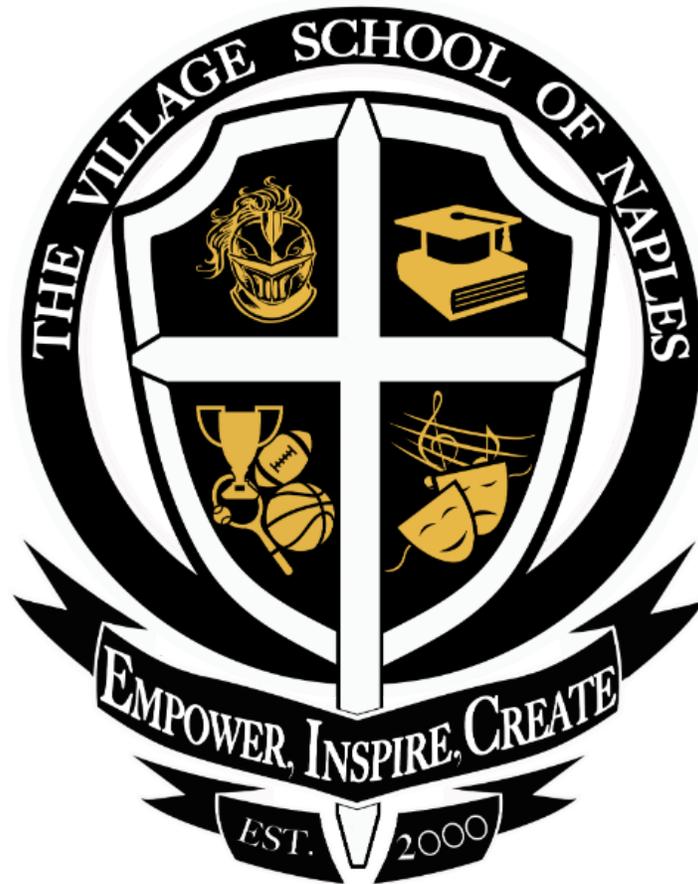# The Village School's Rising 5th Grade Summer Math Packet 2022

Name: _____

You are invited to complete these pages over the summer in anticipation of the first day of school in August.

Fraction Review

Part One – Write the following fractions in simplest form

| $\frac{20}{35}$ | $\frac{15}{20}$ | $\frac{6}{9}$ | $\frac{40}{50}$ | $\frac{24}{28}$ |

| $\frac{12}{18}$ | $\frac{16}{20}$ | $\frac{4}{6}$ | $\frac{20}{22}$ | $\frac{14}{21}$ |

Part Two – Circle the fractions below that are in simplest form already.

| $\frac{6}{7}$ | $\frac{13}{26}$ | $\frac{9}{11}$ | $\frac{10}{12}$ | $\frac{15}{18}$ | $\frac{13}{17}$ | $\frac{21}{29}$ |

Part One – Write the following decimals as fractions.

0.75 = _____   0.8 = _____   0.97 = _____

0.3 = _____   0.19 = _____   0.91 = _____

Part Two – Write the following improper fractions as mixed numbers.

$\frac{15}{8}$ $\frac{12}{5}$ $\frac{23}{8}$ $\frac{34}{11}$

Part Three - Write four of your own changing mixed numbers into improper fractions.

Place Value Review

Follow the steps to find the numbers below.

Write 6 in the ones place.

Write 4 in the thousands place.

Write 9 in the hundred thousands place.

Write 7 in the tens and hundreds place.

Write 1 in the millions place.

The remaining places are zeros.

___ , ___ ___ ___ , ___ ___ ___

Follow the steps to find the numbers below.

Write 6 in the millions place.

Write 3 in the thousands place.

Write 2 in the hundreds and tens place.

Write 5 in the ten thousands place.

Write 9 in the hundred thousands place.

The remaining places are zeros.

___ , ___ ___ ___ , ___ ___ ___

Follow the steps to find the numbers below.

Write 4 in the ones and millions place.

Write 2 in the thousands place.

Write 5 in the hundreds place.

Write 7 in the hundred thousands place.

The remaining places are zeros.

___ , ___ ___ ___ , ___ ___ ___

Follow the steps to find the numbers below.

Write 7 in the ones and tens place.

Write 4 in the millions place.

Write 2 in the ten thousands place.

The remaining places are zeros

___ , ___ ___ ___ , ___ ___ ___

Answer the following questions:

Write the number that is 1,000 more than 44,050. _____

Write the number that is 10,000 more than 16,789 _____

Write the number that is 1,000,000 less than 5,713,539 _____

Write the number that is 10,000 less than 55,624 _____

Write the number that is 100,000 less than 578,000 _____

Geometry Review (Draw and name each)

Draw a quadrilateral with two pairs of parallel sides. Name it.	Draw a quadrilateral with two pairs of parallel sides, but no right angles. Name it.	Draw a trapezoid.
Draw a polygon with six sides. Name it..	Draw a triangle with no equal sides. Name it.	Draw an angle that is bigger than 90 degrees and smaller than 180. Name it.

Multiplication

Solve.

$$\begin{array}{r} 64 \\ \times\ 48 \\ \hline \end{array} \qquad \begin{array}{r} 75 \\ \times 47 \\ \hline \end{array} \qquad \begin{array}{r} 26 \\ \times 33 \\ \hline \end{array} \qquad \begin{array}{r} 427 \\ \times 15 \\ \hline \end{array} \qquad \begin{array}{r} 583 \\ \times 46 \\ \hline \end{array}$$

Be sure to practice your multiplication facts over the summer about 10 minutes per day.

Factors Review

Write all the factors for the following numbers:

20 = ____ , ____ , ____ , ____ , ____ , ____

16 = ____ , ____ , ____ , ____ , ____

28 = ____ , ____ , ____ , ____ , ____ , ____

36 = _____

(you need to figure this one out on your own)

Writing Numbers

Write the following numbers in expanded form:

40,568 _____

367,009 _____

87,098 _____

Write the following numbers in standard form:

7,000,000 + 500,000 + 6,000 + 800 + 5 _____

Fifty-five thousand, six hundred twenty-five _____

346 thousands, 8 hundreds _____

9,000,000 + 40,000 + 7,000 + 500 + 50 + 9 _____

Cross Curricular Activities with Parent Supervision

1. M & M & M's Game (Mean, Median, & Mode Game)

- **Equipment: Pencils, paper, playing cards, calculator (optional)**
- **Set-up: First review what they each mean:**
  Mean is the average of all of the numbers in a sample. Add up all of the numbers in a set and divide by the total number of items to calculate a mean.
  Median is the middle number in a series of numbers that's ordered from least to greatest. If there's an even number of items in the data set, the median can be calculated by averaging the two middle numbers.
  Mode is the number that appears the most times in the data set
- **Game Play: 4 players to tackle this card game and practice each of these math concepts. Using only the Ace through 10 cards, deal out 7 cards to each player. Have everyone arrange their cards in sequential order, with every Ace representing the number 1. Then, depending upon which game you want to play, follow these directions:**
  a) Finding the Mean Game. Instruct everyone playing to find the total value of the numbers on their cards. Each player should then divide their total by 7 (the total number of items in the set) and round to the nearest whole number to find the mean. For example, if the cards in your hand are 2, 2, 3, 6, 7, 7, 9, then the sum of those digits is 38. Divide the sum by 7 to get 5 as your answer. Your answer represents the number of points you receive in each round. Provide scratch paper and pencils to help players find the answer to every division problem, or use a calculator to speed up the process. Winner is the first one to total 21 points.
  b) Finding the Median Game. In this game, players get a number of points that match the median card in their hands. the point value for the hand above would be 6, since 6 is the value of the median card in that set. Winner is the first one to total 21 points.
  c) Finding the Mode Game. Just like in the games above, the number of points in the game rounds here is reflected by the mode in each hand of cards. If there isn't a mode (a number appearing more than once), then that player scores a 0 for that round. In the situation where there are multiple modes, such as in the hand above, the player receives a number of points that matches the sum of the modes. For example, the mode for the hand above would be 9, since 7 and 2 are both modes. Winner is the first one to total 21 points.

2. Wastepaper Basketball (Trashketball)

Equipment: Wastebasket, trash ball, paper, and pencil
What to do:
1. Explain to your child that you are going to play Wastepaper Basketball, and record your successes and failures. Have your child set up the wastebasket a reasonable distance from the throw line. Suggest that each of you attempt to throw a trash ball into the basket 10 times.
2. Rotating turns, throw the ball ten times each. After each throw, record your own results. You can make a chart to show successful and failed attempts or you can use a simple tally system.
3. Now that you have your data, it's time to find the ratio which reflects each of your results. Start by showing the ratio of your attempts and then let your child find his ratios. For example, if you were successful 4 times then the ratio of your successful attempts is 4 out of 10. The ratio that shows your failed attempts is 6 out of 10.
4. Next, show your child how to write the ratio in decimal form. In this example, the decimal 0.4 shows your successes and the decimal 0.6 shows your failures. If your child is confused by this representation, start with the fractions 4/10 and 6/10 and then convert them to decimal form by dividing the numerator by the denominator. Remind your child that the number 4 represents your successful tries and the number 10 represents the total number of attempts.
   Other options include giving your child Math questions before every shot so they earn each turn.

3. Multiplication War

Using a deck of cards, use all cards to play multiplication war. The ace is = 1, Jack = 11, Queen = 12, and King = 13. Deal out all of the cards between 2 or 3 players. Each player turns over 2 cards and multiplies the two cards together. The player with the highest product wins the pile of cards. Winner is who has the most cards after all the turns are complete.