## $4^{\text {th }}$ Grade Math Parent Guide

|  | $1^{\text {st }}$ Grading Period | $2^{\text {nd }}$ Grading Period | $3^{\text {rd }}$ Grading Period | $4^{\text {th }}$ Grading Period |
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| Units/TEKS <br> Process <br> Standards <br> 4.1ABCDEFG <br> through every unit TEKS | Unit 5: Place Value, Rounding, Addition, Subtraction Larger Numbers 4.9AB, 4.2ABCDEFGH, 4.4AG, 4.5ACD | Unit 3 and Unit 8: Multiplication, Division, Area and Perimeter, Graphs and Data 4.4BCDEFGH, 4.5CD, 4.9AB | Unit 6 and Unit 4: Fractions and Decimals, Geometry (2D figures, symmetry, and angles), Area and Perimeter <br> 4.2G, 4.3ABCDEFG, 4.6ABCD, 4.7ABCDE | Area and Perimeter, Measurement Conversions, Data, Personal Financial Literacy, STAAR Review 4.5CD, 4.8ABC, 4.9AB, 4.10ABCDE, 4.4A |
| Topic Focus | Unit 5: This unit extends the students' knowledge of the number system to 10,000; adding and subtracting accurately and efficiently; describing, analyzing, and comparing strategies for addition and subtraction; and understanding different types of subtraction problems. | Unit 3: This unit's mathematical focus is on solving multiplication problems with 2-digit numbers, understanding, and using the relationship between multiplication and division to solve division problems, reasoning about numbers and their factors, and representing the meaning of multiplication and division. <br> Unit 8: This unit focuses on solving multiplication problems with 2-digit numbers and understanding division as making groups of the divisor. | Unit 6: This unit focuses on the understanding and use of fractions and decimals and how they relate to whole numbers. <br> Unit 4: These units develop ideas about the attributes of 2-D and 3-D shapes, and how these attributes determine their classification. They also develop ideas about linear measurement (perimeter), area, and the measurement of angles. | Measurement: This unit's mathematical focus is on identifying relative sizes of measurement, measurement conversions, and solving problems that deal with measurements. |
| Suggestions for Parental Involvement /Support | Strategy 1: Adding One Number in Parts Students begin with one of the addends and add up using numerical relationships such as tens and ones, make ten facts, or landmark numbers. $2,357+4,899$ <br> Using a number line: $\begin{aligned} & \text { 4,899 4,900 5,000 5,200 5,256 } 7,256 \\ & \text { Or using equations: } \\ & 2,357+4,000=6,3257 \\ & 6,357+700+100=7,157 \\ & 7,157+50+40=7,247 \\ & 7,247+3+6=7,256 \end{aligned}$ <br> Strategy 2: Traditional Algorithm In this strategy, students line numbers up by place value and add them from right to left. Regrouping is an area that many students struggle with in this strategv. $\begin{array}{r} 2,357 \\ +4,899 \\ \hline 7,256 \end{array}$ | Fact Fluency: In the first unit, students will be working to become fluent with their multiplication facts. Students are encouraged to use the commutative property ( $6 \times 8$ has the same product as 8X6) to have less facts to memorize. Students will also be identifying strategies to help them find the product of a fact they have not memorized yet by thinking about decomposing facts and using compensation. <br> Decomposing Facts $\begin{aligned} & 7 \times 8=(8 \times 5)+(8 \times 2) \\ & 7 \times 8=40+16 \\ & 7 \times 8=56 \end{aligned}$ <br> Compensation <br> $3 \times 10$ is a fact I know. If I start with $3 \times 10$, I can just subtract one group of three to get the answer to $3 \times 9$. | Fractional Representations: <br> Students will be expected to read and write proper and improper fractions. One way to determine the name of the fraction is to count the fractional parts. <br> Think: $\frac{1}{3}, \frac{2}{3}, \frac{3}{3}, \frac{4}{3}, \frac{5}{3}$ <br> Or $\frac{1}{3}, \frac{2}{3}, 1,1 \frac{1}{3}, 1 \frac{2}{3}$ <br> Put the following fractions where they belong on the number line. <br> $\frac{1}{2} \frac{3}{4} \quad \frac{1}{8} \frac{1}{4}$ <br> The number line is an important model because it illustrates not just individual fractions but shows the relationships among them. For example, we can see that $\frac{1}{4}$ is half of $\frac{1}{2}$ and that $\frac{1}{8}$ is half of $\frac{1}{4}$ by looking at this number line. Students can also | Measuring with a Protractor <br> Place the center point of the protractor over the center point of the angle. Match the $0^{\circ}$ line of the protractor along one side of the angle. Then read where the other side of the angle crosses the edge of the protractor to find the angle measurement. <br> There are two numbers on the protractor, $40^{\circ}$ and $140^{\circ}$. I know that the measurement cannot be $140^{\circ}$ because I estimate that this angle is less than $90^{\circ} .140$ is not less than 90. This angle measurement must be $40^{\circ}$. Finding Missing Angles <br> Find the measure of < BDC. Explain your reasoning. |



