## Dear Families,

Our fifth math unit will be on multiplication. Don't forget to visit the 4th Grade Math Site for more resources!

## Standards Covered

 CCSS.Math.Content.4.NBT.B. 5Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

New Vocabulary (see 4th Grade Math website for definitions)

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\starArray
\starVariable
\starComparison problem
\starPrime number
\starComposite number
\starFactor
\starMultiple
\starArea model
\starEstimate
```


## Example Problems

$\star 72$ is 9 times as many as
$\star$ Brutus the dog at 5 biscuits. Ollie the dog ate 3 times as many biscuits. How many biscuits did Ollie eat?
$\star$ A monkey weighs 81 pounds, which is 9 times as much as a guinea pig. How much does a guinea pig weigh?
$\star$ List all factor pairs of 42.
$\star$ Is 34 a prime number?
$\star$ Draw an area model for $53 \times 21$.
$\star$ A family goes to a movie. They bought two adult tickets for $\$ 10$ each and 3 children's tickets for 6 each. They got two buckets of popcorn for $\$ 7$ each. How much did they spend on tickets?

Key Methods (see 4th Grade Math website for more info)
$\star$ Using comparison bars to solve word problems.
For each problem, do the following:

1. Say which amount is larger.
2. Draw comparison bars.
3. Decide if you need to divide or multiply. Think: Do you know the larger amount already?
4. Write an equation.
5. Write your answer with a label.

Use the first problem as a model.
Example: Paige had nine times as many dollars as her sister. Paige has seventy-two dollars. How much money does her sister have?
Larger amount: Paige
Comparison bars:


Sister (s) $\square$
Circle One: Multiply of Divide
Equation: $72 \div 9=5$
Answer with label:

$\star$ Using area models to visualize and solve multiplication problems: $37 \times 24$.
Note: Students will be required to use the area model method for the assessment. The traditional method may be taught as well.

Area Model Sketch

Please contact us if you have any questions,

The District 90 4th grade team


