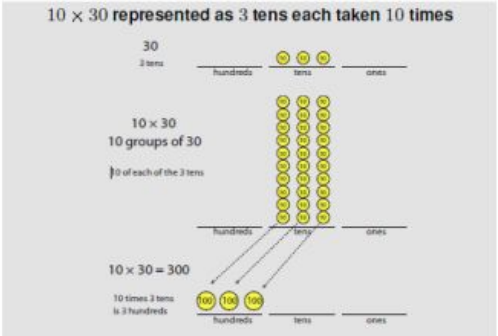




Grade 4 Unit 5 Family Resource
Unit Name: Place Value and Computation

What's my child learning in Unit 5?	What does this mean? What does it look like?	How can I help my child at home?
<ul style="list-style-type: none"> Students will recognize in any multi-digit whole number a digit in one place represents ten times what it represents in its place to the right 	<p>In our number system, the value of each place is 10 times the value of the place to the immediate right. Because of this, multiplying by 10 give an answer where each digit of the original number is shifted one place to the left.</p> 	<p style="text-align: center;">Place Value Riddles</p> <p>Use what you know about place value to find the mystery number.</p> 
<ul style="list-style-type: none"> Students will read and write multi-digit whole numbers using base ten numerals, number names, and expanded form and compare multi-digit whole numbers with symbols. 	<p>Standard Form: 463,732</p> <p>Word Form: Four-hundred-sixty-three thousand, seven-hundred-thirty-two. DO not say AND in between the hundreds and tens digits. AND is said as the decimal point separating wholes and parts.</p> <p>Expanded Form: 400,000 + 60,000 + 3,000 + 700 + 30 + 2.</p> <p>Other: 46 ten thousands, 30 one hundreds, 73 tens, and 2 ones</p> <p>Comparison Symbols: <, >, = Ex) 463,732 < 500,000</p>	 <p style="text-align: center;">This StudyJams interactive video and quiz shows strategies for comparing and ordering numbers.</p>
<ul style="list-style-type: none"> Students will round multi-digit whole numbers to any place by making generalizations in a variety of situations to determine if their answer is reasonable. 	<p>Students need to use rounding and estimation strategies to solve word problems.</p> <p>Example: Your class is collecting bottled water for a service project. The goal is to collect 300 bottles of water. On the first day, Max brings in 3 packs with 6 bottles in each container. Sarah wheels in 6 packs with 6 bottles in each container. About how many bottles of water still need to be collected?</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; width: 45%;"> <p>Student 1 First, I multiplied 3 and 6 which equals 18. Then I multiplied 6 and 6 which is 36. I know 18 plus 36 is about 50. I'm trying to get to 300. 50 plus another 50 is 100. Then I need 2 more hundreds. So we still need 250 bottles.</p> </div> <div style="border: 1px solid black; padding: 5px; width: 45%;"> <p>Student 2 First, I multiplied 3 and 6 which equals 18. Then I multiplied 6 and 6 which is 36. I know 18 is about 20 and 36 is about 40. 40+20=60. 300-60 = 240, so we need about 240 more bottles.</p> </div> </div>	<p>Learn Zillion Video</p> <p>Click on the link above to view a video about rounding using benchmark numbers on a number line.</p>

- Students will fluently subtract multi-digit whole numbers using the standard algorithm

$$\begin{array}{r} 3546 \\ - 928 \\ \hline \end{array}$$

Student explanation for this problem:

- There are not enough ones to take 8 ones from 6 ones so I have to use one ten as 10 ones. Now I have 3 tens and 16 ones. (Marks through the 4 and notates with a 3 above the 4 and writes a 1 above the ones column to be represented as 16 ones.)
- Sixteen ones minus 8 ones is 8 ones. (Writes an 8 in the ones column of answer.)
- Three tens minus 2 tens is one ten. (Writes a 1 in the tens column of answer.)
- There are not enough hundreds to take 9 hundreds from 5 hundreds so I have to use one thousand as 10 hundreds. (Marks through the 3 and notates with a 2 above it. (Writes down a 1 above the hundreds column.) Now I have 2 thousand and 15 hundreds.
- Fifteen hundreds minus 9 hundreds is 6 hundreds. (Writes a 6 in the hundreds column of the answer).
- I have 2 thousands left since I did not have to take away any thousands. (Writes 2 in the thousands place of answer.)



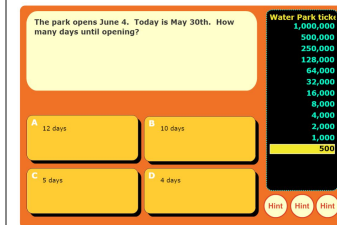
[Study Jams Subtraction](#)

This Study Jams video models subtraction strategies.

- Students will use **addition and subtraction** to solve multi-step (at least 3 steps) word problems and write equations to represent the unknown quantity.

Addition/Subtraction Problem Structures:

	Result Unknown	Change Unknown	Start Unknown
Add to	Two bunnies sat on the grass. Three more bunnies hopped there. How many bunnies are on the grass now? $2 + 3 = ?$	Two bunnies were sitting on the grass. Some more bunnies hopped there. Then there were five bunnies. How many bunnies hopped over to the first two? $2 + ? = 5$	Some bunnies were sitting on the grass. Three more bunnies hopped there. Then there were five bunnies. How many bunnies were on the grass before? $? + 3 = 5$
Take from	Five apples were on the table. I ate two apples. How many apples are on the table now? $5 - 2 = ?$	Five apples were on the table. I ate some apples. Then there were three apples. How many apples did I eat? $5 - ? = 3$	Some apples were on the table. I ate two apples. Then there were three apples. How many apples were on the table before? $? - 2 = 3$
	Total Unknown	Addend Unknown	Both Addends Unknown¹
Put Together/ Take Apart²	Three red apples and two green apples are on the table. How many apples are on the table? $3 + 2 = ?$	Five apples are on the table. Three are red and the rest are green. How many apples are green? $3 + ? = 5, 5 - 3 = ?$	Grandma has five flowers. How many can she put in her red vase and how many in her blue vase? $5 = 0 + 5, 5 = 5 + 0$ $5 = 1 + 4, 5 = 4 + 1$ $5 = 2 + 3, 5 = 3 + 2$
	Difference Unknown	Bigger Unknown	Smaller Unknown
Compare³	("How many more?" version): Lucy has two apples. Julie has five apples. How many more apples does Julie have than Lucy? $2 + ? = 5, 5 - 2 = ?$	("Version with 'more'"): Julie has three more apples than Lucy. Lucy has two apples. How many apples does Julie have? $2 + 3 = ?, 3 + 2 = ?$	("Version with 'more'"): Julie has three more apples than Lucy. Julie has five apples. How many apples does Lucy have? $5 - 3 = ?, ? + 3 = 5$



[Water Park Problem Solving](#)

Click the link above to play a waterpark problem solving game!