

Math: Grade 4, Lesson 2, Addition using Place Value Chart

Lesson Objective: Addition using Place Value Chart

Practice Focus: Multi-Digit Whole Number Addition using a Place Value Chart

TN Standard: 4.NBT.B.4

Teacher Materials:

- White board and markers

Student Materials:

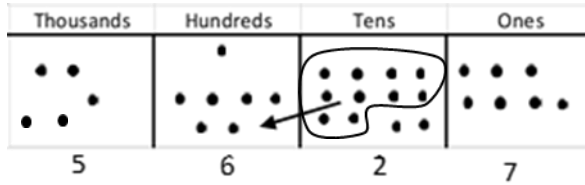
- paper and a pencil
- the student packet for Math, Grade 4, Lesson 2 which can be found at www.tn.gov/education

Teacher Do	Student Do
<p>Opening</p> <p>Hello! Welcome to Tennessee's At Home Learning Series for math! Today's lessons is for all our 4th graders out there, though all children are welcome to tune in. This lesson is the second in our series on this topic.</p> <p>My name is ____ and I'm a ____ grade teacher in Tennessee schools! I'm so excited to be your teacher for this lessons. Welcome to my virtual classroom!</p> <p>If you didn't see our previous lesson, you can find it at www.tn.gov/education. You can still tune in to today's lesson if you haven't see any of our others. But, it might be more fun if you first go back and watch our other lessons since we'll be talking about things we learned previously.</p> <p>Today we will be learning about adding multi-digit whole numbers using a place value chart. Before we get started, to participate fully in our lesson today you will need:</p> <ul style="list-style-type: none"> • paper and a pencil • the student packet for Math, Grade 4, Lesson 2 which can be found at www.tn.gov/education <p>Ok, let's begin!</p>	
<p>Intro</p> <p>Today we are going to practice adding multi-digit whole numbers using a place value chart</p> <p>[Write $218+200$]</p> <p>Can you say the numbers in unit form? [Pause] That's right, 2 hundreds, 1 ten and 8 ones plus 2 hundreds.</p> <p>Think about a strategy to add these numbers. [Pause]</p>	<p>Students respond</p> <p>Students think of a strategy</p>

<p>For this problem, we can add the hundreds, 200 plus 200, then add the tens and ones, plus 1 ten, plus 8 ones equals 418.</p> <p>[Repeat the above process and sequence for: 218+400, 218+450, and 218+456]</p> <p>Answers: 618, 668, 674</p>																									
<p>Teacher Model</p> <p>For this problem, let’s add, renaming once, using place value disks in a place value chart.</p> <p>[Write vertically: 3,134 + 2,493.] Say this problem with me.</p> <p>[Pause]</p> <p>Draw a place value chart on your paper with me. [Model drawing a place value chart with thousands, hundreds, tens and ones.]</p> <table><tr><th>Thousands</th><th>Hundreds</th><th>Tens</th><th>Ones</th></tr><tr><td></td><td></td><td></td><td></td></tr></table> <p>I am going to draw place value disks on the place value chart to represent the first number, 3,134. [Draw 3 circles in the thousands column, 1 in the hundreds column, 3 in the tens column and 4 in the ones column.]</p> <table><tr><th>Thousands</th><th>Hundreds</th><th>Tens</th><th>Ones</th></tr><tr><td>• • •</td><td>•</td><td>• • •</td><td>• • • •</td></tr></table> <p>Now, it is your turn. Draw 2,493 on the same place value chart. [Pause, and then draw circles in the correct columns to represent the number.]</p> <table><tr><th>Thousands</th><th>Hundreds</th><th>Tens</th><th>Ones</th></tr><tr><td>• •</td><td>• • • •</td><td>• • • • • •</td><td>• • •</td></tr></table> <p>[Point to the problem.] Now, 4 ones plus 3 ones equals?</p> <p>[Pause]</p> <p>[Count 7 ones in the chart and record 7 at the bottom.]</p> <p>[Point to the problem.] Now, 3 tens plus 9 tens equals?</p> <p>[Count 12 tens in the chart.]</p>	Thousands	Hundreds	Tens	Ones					Thousands	Hundreds	Tens	Ones	• • •	•	• • •	• • • •	Thousands	Hundreds	Tens	Ones	• •	• • • •	• • • • • •	• • •	<p>Students respond</p> <p>Students draw</p> <p>Students respond</p> <p>Students respond</p>
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We can bundle 10 tens as 1 hundred.

[Circle 10 tens disks, draw an arrow to the hundreds place, and draw the 1 hundred disk to show the regrouping.]



Students draw

We can represent this in writing. [Write 12 tens as 1 hundred, crossing the line, and 2 tens in the tens column so that you are writing 12 and not 2 and 1 as separate numbers. Refer to the visual above.]

[Point to the problem.] **1 hundred plus 4 hundreds plus 1 hundred equals?** [Pause] **Yes! 6 hundreds**

Students respond

[Point to the problem.] **3 thousands plus 2 thousands equals?** [Pause] **Yes! 5 thousands.**

Students respond

Say the equation with me: 3,134 plus 2,493 equals 5,627.

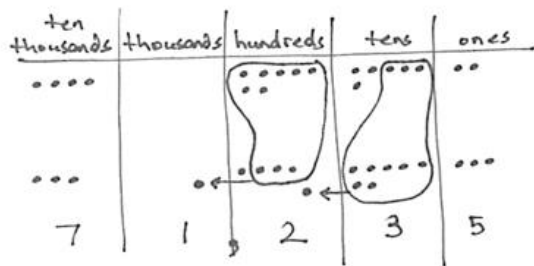
Students respond

Guided Practice

Let's try another example! [Write vertically: $40,762 + 30,473$.]

Write the problem, and draw disks for the first addend in your chart. Then, draw disks for the second addend.

[Pause and allow students time to draw. Then draw the example yourself]



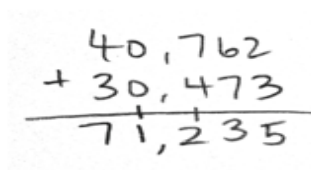
Students draw

[Point to the problem.] **2 ones plus 3 ones equals? 5 ones** [Count the disks to confirm 5 ones and write 5 in the ones column]

[Point to the problem.] **6 tens plus 7 tens equals?** [Pause]

Yes, 13 tens.

Students respond

<p>Since 13 tens is the same value as 10 tens and 3 tens, we need to regroup the 10 tens to make a hundred. This will leave 3 tens in the tens place.</p> <p>[Regroup the disks.] Watch me as I record the larger unit using the addition problem.</p> <p>First, record the 1 on the line in the hundreds place, and then record the 3 in the tens so that you are writing 13, not 3 then 1.</p>  <p>7 hundreds plus 4 hundreds plus 1 hundred equals 12 hundreds. Think about how to record this. [Continue adding, regrouping, and recording across other units.]</p> <p>Say the equation with me. 40,762 plus 30,473 equals 71,235.</p>	<p>Students respond</p>
<p><u>Independent Practice</u></p> <p>Great job students! Thanks for helping me with multi-digit whole number addition using a place value chart. After the video, you will have some problems to practice on your own. Good luck and do your best!</p>	
<p><u>Closing</u></p> <p>I enjoyed learning about math with you today! Thank you for inviting me into your home. I look forward to seeing you in our next lesson in Tennessee's At Home Learning series.</p> <p>Bye!</p>	

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