

# 2.NBT.7

This math unit provides lesson plans and math group resources to use while teaching the standard 2.NBT.7, which states that students will be able to...

**"Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds."**

**2nd Grade**

## ADDING & SUBTRACTING UP TO 1,000

355 + 244    541 + 283  
652 + 247    365 + 302

**Strategy: Base-Ten**  
You can use base-ten blocks to solve addition and subtraction problems.

259    652-345    304 + 258  
246-237    267 + 223    88 + 204  
554-372

# 2.NBT.7

Created by Jessica Tobin

## Using This Unit

Let's look at the structure of this unit.

### Pre-Assessment

- A pre-assessment is included that will help give you an idea of where your students are with this specific standard. Give this pre-assessment prior to any lessons on the standard.

### Daily Lessons





- Whole Group-** The whole group lesson will typically involve an anchor chart or poster to discuss. This should take about five minutes to complete.
- Partner Practice-** The whole group activity will be followed up with a partner practice activity. It will build on the knowledge the students learned or reviewed in the whole group lesson. This should take between 5-10 minutes.
- MATH Groups-** There are four break-apart groups to do a day. Each rotation can last between 10-15 minutes depending on how long you get for your math block.
  - Math Writing-* 2 writing options are given each day (one full sized page OR a cut and glue strip for a math journal)
  - Apply Skills-* You will find a variety of practice resources here, such as printables, interactive notebooks, or partner activities.
  - Teacher Time-* Small group differentiation can happen here. Most days will include a GREEN 'Remediation' activity, a BLUE 'On-Level' activity, and a PURPLE 'Enrichment' activity. Since there are four group activities and only differentiated levels, some groups will use the same material determined by their data and needs.
  - Hands-on Practice-* These centers will give your students chances to get practice with manipulatives and other engaging activities.
- Exit Slip-** Every single day will come with an exit slip for students to show what they learned that day. Teacher will cut apart the three strips.

### Assessment

- This is to be completed after all lessons and math groups are taught.

# Daily Lesson Plans

Each standards-based math unit comes with daily lessons. Some are 3 days, while others may be 5+ days, depending on how complex the standard is. There are **4 main components** of each daily lesson.

2 <sup>nd</sup> Grade Math: 2.NBT.7 Lesson #1	2.NBT.7 lesson 1
Lesson #1	I can add and subtract 3-digit numbers.
Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that, in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	
Activities	Materials
<b>Whole Group</b> Teacher will introduce addition and subtraction strategies poster/anchor chart. However, today's focus is all about concrete (base-ten blocks) strategies when adding and subtracting. Teacher will introduce anchor chart about using base-ten blocks, or teacher can display mini posters and discuss. Then teacher will model how to represent a 3-digit addition and 3-digit subtraction problem with base-ten blocks, drawing cards from the pile.	
<b>Partner Practice</b> Students will work with partners and base-ten blocks to draw a card and solve. They will write their answers on a Post-it note, then find a nearby group and check their answers.	
<b>Math Groups</b> <b>M</b> - Students will write about the base-ten block strategy. Teacher will choose the full page writing sheet OR the cut-apart strips for math journals. <b>A</b> - Teacher will either copy the two printables front/back for students to complete with pencils or slide them into sheet protectors for students to complete with dry erase markers. <b>T</b> - <b>GREEN</b> : Students will work with a teacher to draw a task card, represent the blocks together, then solve the problem. <b>BLUE</b> - Students will use base-ten blocks to draw a card, solve, and write their answer on a recording sheet. <b>PURPLE</b> : Partners will quiz each other, using blank problems. Student 1 will write a 3-digit +/- problem. Student 2 will represent it with base-ten blocks and solve. <b>H</b> - Students will use the base-ten board and addition and subtraction problems to fill in the game board. They will draw a card from the pile, solve it, and then cross out that sum or difference on the game board.	
<b>Exit Slip</b> Students will complete an exit slip independently. Students will trade papers with a nearby classmate and grade their paper with a marker/pen while teacher reviews answers as a whole group.	

**Whole group activity:** This activity will typically include an anchor chart mini poster, plus some sort of teacher modeling activity.





**Partner practice:** This will be a hands-on partner activity following the whole-group.

**M.A.T.H. groups:** (Explained in depth on next page) There are four groups/centers.

**Exit slip:** There are 3 exit slips to a page to cut out and administer for student learning.

# M.A.T.H. Groups

Each day comes with four group activity suggestions and materials for 'M.A.T.H.' groups. This is your small group time, splitting the class up into four groups to rotate around the room, participating in different activities for 10-20 minutes a piece.

<b>M</b>	<b>Math Writing</b>	2 options... worksheet or cut/glue notebook strips	
<b>A</b>	<b>Apply New Skills</b>	Worksheet or interactive notebook activities to apply the skill learned in whole group	
<b>T</b>	<b>Teacher Time</b>	Differentiated time for 3 levels (remediation, on-level, enrichment)	
<b>H</b>	<b>Hands-On Math</b>	Engaging center to follow up on the whole group/partner practice	



# Day 2 Activities

Here's a look at day 2's whole group, partner practice, MATH group activities, and exit slip.

**2<sup>nd</sup> Grade Math: 2.NBT.7 Lesson #2**  
 You can add and subtract 3-digit numbers.

**Strategy 2: Break-Apart** (with regrouping)  
 You can use expanded form to solve addition and subtraction problems.

**Let's try...**  
 $355 + 442$   
 $565 + 224$

**Expanded Form**  
 $436 + 458 =$   
 $522 + 362 =$   
 $794 + 254 =$   
 $894 + 382 =$   
 $58 + 385 =$

**Partner Practice Cards:**

- $457 + 425$
- $743 - 253$
- $652 - 348$
- $344 + 258$
- $267 + 223$
- $818 - 24$
- $523 + 378$
- $591 - 3$
- $890 - 720$
- $435$
- $926 - 883$
- $652 + 2$
- $845 - 265$
- $325 + 429$
- $984 - 220$
- $650$
- $653 - 349$
- $789 - 6$
- $714 - 291$
- $812 - 406$
- $175 + 115$
- $335$
- $325 + 328$
- $248 + 2$
- $550 - 340$
- $982$
- $620 - 220$
- $650$
- $756 - 277$
- $356 +$
- $451 + 472$
- $353 - 248$
- $684 - 382$
- $324 + 365$
- $804$
- $923 - 255$
- $653 +$
- $652 + 158$
- $574$
- $500 - 334$
- $374 +$
- $444 + 256$
- $602$
- $965 - 287$
- $436 +$
- $246 + 273$
- $200$
- $954 + 248$
- $400$
- $542 + 383$
- $500$
- $451 + 472$
- $400$
- $684 - 382$
- $600$
- $655 + 229$
- $600$
- $741 - 238$
- $700$
- $834 - 355$
- $800$
- $425 + 369$
- $400$
- $522 - 272$
- $500$
- $932 - 608$
- $900$
- $555 + 355$
- $500$
- $624 - 353$
- $600$
- $950 - 228$
- $900$
- $623 + 296$
- $600$

**Exit Slips:**

**2.NBT.7 Exit Slip #2**  
 Break each number into its expanded form to solve.  
 $452 + 453$        $921 - 506$

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# Day 3 Activities

Here's a look at day 3's whole group, partner practice, MATH group activities, and exit slip.

**2<sup>nd</sup> Grade Math: 2.NBT.7 Lesson #3**

**2.NBT.7 Lesson #3**

**Strategy 3: Number Line** (Without Regrouping)

An OPEN number line that is blank

$523 + 322$

Start with your first number. Then jump 3 big jumps to show your hundreds. Then jump 2 medium jumps for your tens. And finally, 2 small jumps for your ones.

$845 - 224$

**Strategy 3: Number Line** (With Regrouping)

An OPEN number line that is blank

$386 + 322$

Start with your first number. Then jump 3 big jumps to show your hundreds. Then jump 2 medium jumps for your tens. And finally, 2 small jumps for your ones.

$93 - 224$

**Let's try...**

$657 + 242$

**Let's try...**

$714 - 265$

**Let's try...**

$426 + 324$

$374 + 392$

$269 + 258$

**Ms. McConagall wants to use an open number line to solve the problem  $723 - 345$ .**

a. Show her open number line.  
b. Explain the process of subtracting on this number line.

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**Open Number Lines**

Use the number line to solve the math problem.

$253 + 235 =$

$824 + 325 =$

$378 + 324 =$

$901 - 125 =$

$472 + 352 =$

$641 - 224 =$

$487 + 246 =$

$687 + 235 =$

**Day 3 Inequalities - Green Group**

$350 + 222$

$654 - 132$

**Day 3 Inequalities - Blue Group**

$742 - 211$

$515 + 342$

**Day 3 Inequalities - Purple Group**

$742 - 211$

$515 + 342$

**Day 3 Inequalities - Blue Group**

$416 + 236$

$653 - 248$

$475 + 372$

**Day 3 Inequalities - Blue Group**

$542 + 349$

$623 - 283$

$478 - 259$

$362 + 362$

$857 + 227$

$658 - 329$

**Spin-a-Problem**

1. Spin your first addend above.  
2. Spin for addition or subtraction.  
3. Spin your second addend.  
4. Solve.

$568$   $469$   $375$   
 $328$   $476$   $585$   
 $557$   $542$   $225$   $12$   
 $236$   $352$   $129$   $42$

**2.NBT.7 Exit Slip #3**

Use the number line to solve the problem you spun, then write the answer.

$579 + 232$   $801 - 224$

**2.NBT.7 Exit Slip #3**

Use the number line to solve the problem you spun, then write the answer.

$579 + 232$   $801 - 224$

**2.NBT.7 Exit Slip #3**

Use the number line to solve the problem you spun, then write the answer.

$579 + 232$   $801 - 224$

# Day 4 Activities

Here's a look at day 4's whole group, partner practice, MATH group activities, and exit slip.

2nd Grade Math: 2.NBT.7 Lesson #4

Learn add and subtract 3-digit numbers.

**Adding 3-Digit Number**

Another strategy is to use the standard algorithm to show addition.

Without Regrouping:

$$\begin{array}{r} 573 \\ + 323 \\ \hline 896 \end{array}$$

573 + 323  
Line up H/T/O.  
Start with the ones.  
Then, add the tens.  
Then, add the hundreds.

Let's try...

$$\begin{array}{r} 522 \\ + 455 \\ \hline \end{array}$$

Let's try...

$$\begin{array}{r} 466 \\ + 327 \\ \hline \end{array}$$

Let's try...

$$\begin{array}{r} 733 \\ + 556 \\ \hline \end{array}$$

Let's try...

$$\begin{array}{r} 556 \\ + 327 \\ \hline \end{array}$$

355 + 244

541 + 283

652 + 247

365 + 362

Let's Solve

Let's Solve

Name: \_\_\_\_\_

2.NBT.7

All the Allen read 366 pages on Tuesday and 548 pages on Wednesday. How many pages did he read in all?

a. Show your math in standard algorithm form.  
b. Explain the steps of your math.

Name: \_\_\_\_\_

2.NBT.7

All the Allen read 366 pages on Tuesday and 548 pages on Wednesday. How many pages did he read in all?

a. Show your math in standard algorithm form.  
b. Explain the steps of your math.

Name: \_\_\_\_\_

2.NBT.7

3-Digit Addition

$\begin{array}{r} 296 \\ + 435 \\ \hline \end{array}$	$\begin{array}{r} 556 \\ + 235 \\ \hline \end{array}$	$\begin{array}{r} 394 \\ + 538 \\ \hline \end{array}$
$\begin{array}{r} 383 \\ + 586 \\ \hline \end{array}$	$\begin{array}{r} 497 \\ + 297 \\ \hline \end{array}$	$\begin{array}{r} 395 \\ + 485 \\ \hline \end{array}$

Name: \_\_\_\_\_

2.NBT.7

3-Digit Addition

536 + 227	425 + 259	385 + 358	625 + 258
472 + 356	338 + 548	754 + 229	259 + 528
582 + 358	502 + 279	658 + 272	785 + 235

Day 4 Student Line

2.NBT.7

I can use place value strategies to add and subtract.

There are many different ways to add and subtract.

You can use concrete models, such as base ten blocks to add and subtract within 1000.

Example: 332 + 62

You can also use the standard algorithm to solve.

And Finally, with an open...

Day 4 Student Line

Adding 3-Digit Numbers

Base-Ten Blocks

Expanded Form

424 + 348

520 + 362

Day 4 Math-On Task

A. The bus drove 248 miles on Monday and 298 miles on Tuesday. How many miles did it drive altogether on Monday and Tuesday?

B. Dad cleaned up and my brother and I did 293 Legos. How did Dad and I clean up together?

C. There were 583 bubbles in the dog's bath. When the dog hopped in, 296 more bubbles were made. How many bubbles are in the dog's bath now?

D. Cara and Jerome played board games. Cara played for 39 minutes. Jerome played for 296 minutes. How many minutes did they play together?

E. The Tooth Fairy collected 487 teeth in February and 234 teeth in March. How many teeth did she collect in those two months?

Day 4 Math-On Task

G. The cafeteria had 247 dirty spoons and 367 dirty forks. How many dirty pieces of silverware did the cafeteria helper have to clean?

H. Shawn played with blocks on Monday and blocks on Tuesday. How many blocks has he played with so far this week?

I. My mom and dad biked for 423 miles last month. This month, they've biked another 475 miles. How many miles have they biked altogether?

J. Captain Spark saved people last week and he has saved 288 people this week. How many people has Captain Spark saved last two weeks?

Day 4 Math-On Task

K. Charlie counted 248 Oaties in his cereal on Tuesday and 153 Oaties in his cereal on Wednesday. How many Oaties did he have in all?

L. Mia's Pizzeria made 474 pizzas in June and 384 pizzas in July. How many pizzas did Mia's Pizzeria make in those two months altogether?

Let's Solve

Let's Solve

Day 4 Math-On Task

Name: \_\_\_\_\_

Solve the word problems and write your math problems and sums here.

Problem	Answer
A	
B	
C	
D	
E	
F	
G	
H	
I	
J	
K	
L	

2.NBT.7 Exit Slip #4

Solve each problem using the standard algorithm and solve.

498 + 221	305 + 256	387 + 284	384 + 274
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2.NBT.7 Exit Slip #4

Solve each problem using the standard algorithm and solve.

498 + 221	305 + 256	387 + 284	384 + 274
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2.NBT.7 Exit Slip #4

Solve each problem using the standard algorithm and solve.

498 + 221	305 + 256	387 + 284	384 + 274
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Standard Algorithm

46 + 337





# Assessments

Each unit comes with a pre-assessment to give to students before you teach the standard. This will come before any introduction to the standard. There is also an assessment to give after your unit is complete.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## 2.NBT.7 Pre-Assessment

What math strategy is shown to the right?

H	T	O
700	40	2
+ 100	20	2
800	60	4
+864		

a) Standard algorithm  
b) Base-ten method  
c) Open number line  
d) Break-apart method

What math strategy is shown to the right?

7	5	2
-	3	5
4	0	2

a) Standard algorithm  
b) Base-ten method  
c) Open number line  
d) Break-apart method

Solve the problem below with the different strategies.

Solve using base-ten blocks <b>352+423</b>	Solve using an open number line <b>562-324</b>
Solve using the standard algorithm <b>528-336</b>	Solve using the break-apart method <b>54+320</b>

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Name: \_\_\_\_\_ Date: \_\_\_\_\_

## 2.NBT.7 Assessment

Solve the problems using the given strategy.

Solve using the standard algorithm. <b>425+235</b>	Solve using the standard algorithm. <b>872-235</b>
Solve using the break-apart method <b>523+320</b>	Solve using the break-apart method <b>725-245</b>
Solve using an open number line. <b>457+351</b>	Solve using an open number line. <b>502-234</b>
Solve using base-ten blocks <b>357+252</b>	Solve using base-ten blocks <b>742-325</b>

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