

MSP

Grade 2 Module 5

Lesson Refreshers

&

Homework Starters

Name _____

Date _____

Since we are adding (more) to the hundreds place, the tens and ones places stay the same.

1. Complete each more or less statement.

$222 \xrightarrow{+10} 232$

- a. 10 more than 222 is 232.
- b. 100 more than 222 is 322.
- c. 10 less than 222 is _____.
- d. 100 less than 222 is _____.
- e. 515 is 10 more than _____.
- f. 299 is 100 less than _____.
- g. _____ is 100 less than 345.
- h. _____ is 10 more than 397.
- i. 898 is _____ than 998.
- j. 607 is _____ than 597.
- k. 10 more than 309 is _____.
- l. 309 is _____ than 319.

2. Complete each regular number pattern.

What is the change between the 2 numbers? Use that to complete the pattern

- a. 280, 290, _____, _____, _____, 330
- b. 530, 520, 510, _____, _____, _____
- c. 643, 543, _____, _____, _____, 143
- d. 681, 691, _____, _____, _____, 731
- e. 427, _____, _____, _____, 387, 377
- f. _____, _____, _____, 788, 778, 768

- Start at the right and figure the difference between the two numbers.
- Use that number to complete the pattern.

Place Value

hundreds	tens	ones

Name _____ Date _____

1. Solve each addition problem using place value strategies. Use the arrow way or mental math, and record your answers. You may use scrap paper if you like.

a. 4 hundreds 5 tens + 2 hundreds = 6 hundreds 5 tens

$450 + 200 = 650$

arrow way

b. $220 + 300 = 520$
 220 → 320 → 420 → 520

$230 + 500 = \underline{\hspace{2cm}}$

$200 + 440 = \underline{\hspace{2cm}}$

c. $400 + 368 = \underline{\hspace{2cm}}$

$386 + 500 = \underline{\hspace{2cm}}$

$700 + 239 = \underline{\hspace{2cm}}$

d. $119 + \underline{\hspace{2cm}} = 519$

$\underline{\hspace{2cm}} + 272 = 872$

$62 + \underline{\hspace{2cm}} = 562$

2. Solve each subtraction problem using place value strategies. Use the arrow way or mental math, and record your answers. You may use scrap paper if you like.

a. 5 hundreds 8 ones – 3 hundreds = _____ hundreds _____ tens _____ ones

$508 - 300 = \underline{\hspace{2cm}}$

b. $430 - 200 = \underline{\hspace{2cm}}$

$550 - 300 = \underline{\hspace{2cm}}$

$860 - \underline{\hspace{2cm}} = 360$

c. $628 - 200 = \underline{\hspace{2cm}}$

$718 - 500 = \underline{\hspace{2cm}}$

$836 - 400 = \underline{\hspace{2cm}}$

d. $553 - \underline{\hspace{2cm}} = 153$

$981 - \underline{\hspace{2cm}} = 381$

$827 - \underline{\hspace{2cm}} = 27$

hundreds	tens	ones

Name _____

Date _____

1. Solve each set of problems using the arrow way.

a.	$260 + 200$ $260 + 240$ $260 + 250$	
b.	$320 + 400$ $320 + 480$ $320 + 490$	$300 + 400 = 700$ $700 + 20 = 720$
c.	$550 + 200$ $550 + 250$ $550 + 270$	
d.	$230 + 400$ $230 + 470$ $230 + 490$	

Name _____

Date _____

1. Solve using the arrow way.

<p>a.</p> <p>430 - 200</p> <p>430 - 230</p> <p>430 - 240</p>	<p>430 ⁻¹⁰⁰ → 330 ⁻¹⁰⁰ → 230</p> <p>430 ⁻²⁰⁰ → 230 ⁻³⁰ → 200 ⁻¹⁰ → 190</p>
<p>b.</p> <p>570 - 300</p> <p>570 - 370</p> <p>570 - 390</p>	<p>750 - 400</p> <p>750 - 450</p> <p>750 - 480</p>
<p>d.</p> <p>940 - 330</p> <p>940 - 360</p> <p>940 - 480</p>	<p>900 - 300 = 600 40 - 30 = 10 (610)</p>

subtract to get to the next benchmark number. Then, subtract the remaining amount from the benchmark number.

Name _____

Date _____

1. Solve.

a. 32 tens = _____

b. 52 tens = _____

c. 19 tens + 11 tens = _____ tens

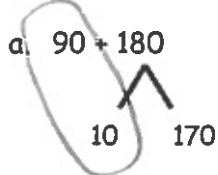
d. 19 tens + 13 tens = 32 tens



e. 28 tens + 23 tens = _____ tens

f. 28 tens + 24 tens = _____ tens

2. *make sure you add to the same place value.*
Add by drawing a number bond to make a hundred. Write the simplified number sentence and solve.



100 + 170 = _____

b. 190 + 460

_____ = _____

Name _____

Date _____

1. Draw and label a tape diagram to show how to simplify the problem. Write the new number sentence, and then subtract.

a. $340 - 190 = \underline{350 - 200} = \underline{150}$

↑ add to reach the next benchmark number

You have to add the same amount to each number.



b. $420 - 190 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$



c. $500 - 280 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$




d. $650 - 280 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

e. $740 - 270 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

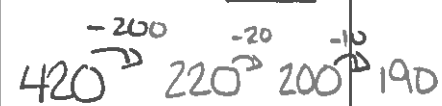
Name _____

Date _____

1. Solve each problem with a written strategy such as a tape diagram, a number bond, the arrow way, the vertical form, or chips on a place value chart.

<p>a.</p> $370 + 300 = \underline{670}$ <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>000</td> <td>00000</td> <td>00</td> </tr> <tr> <td>000</td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>7</td> <td>0</td> </tr> </tbody> </table>	H	T	O	000	00000	00	000			6	7	0	<p>b.</p> $\underline{362} = 562 - 200$ <div style="text-align: center;">  </div> $560 - 200 = \underline{360}$ $\underline{360} + 62 = \underline{362}$	<p>c.</p> $\underline{\hspace{2cm}} + 500 = 812$
H	T	O												
000	00000	00												
000														
6	7	0												
<p>d.</p> $230 - 190 = \underline{40}$ <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>+10</td> <td>230</td> </tr> <tr> <td>+10</td> <td>190</td> </tr> </tbody> </table> $240 - 200 = \underline{40}$	+10	230	+10	190	<p>e.</p> $\underline{\hspace{2cm}} = 640 - 180$	<p>f.</p> $450 - 290 = \underline{\hspace{2cm}}$								
+10	230													
+10	190													

2. Use the arrow way to complete the number sentences.

<p>a.</p> $420 - 230 = \underline{190}$ <div style="text-align: center;">  </div>	<p>b.</p> $340 - 160 = \underline{\hspace{2cm}}$	<p>c.</p> $710 - 350 = \underline{\hspace{2cm}}$
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Name _____

Date _____

1. Solve the following problems using your place value chart, place value disks, and vertical form. Bundle a ten or hundred, when necessary.

<p>a. $505 + 75 = 580$</p>	<p>b. $606 + 84$</p> <p>make sure you bundle groups of 10 <u>and</u> then add one to the tens place</p>
<p>c. $293 + 114$</p> <p>$9 + 1 = 0$, so the "0" goes in the tens place</p>	<p>d. $314 + 495$</p>
<p>e. $364 + 326$ and the group of 10 tens makes 1 hundred (be sure to carry over)</p> <p>f. $346 + 234$</p>	
<p>g. $384 + 225$</p>	<p>h. $609 + 351$</p>

Name _____

Date _____

1. Solve the following problems using a place value chart, place value disks, and vertical form. Bundle a ten or hundred, when necessary.

<p>a. $205 + 345$</p> $\begin{array}{r} 205 \\ + 345 \\ \hline 550 \end{array}$	<p>b. $365 + 406$</p> <p>ten ones is 1 ten and "0" ones Put the "0" in the ones place and carry the group of tens to the tens place. Be sure you include it when adding the tens.</p>
<p>c. $446 + 334$</p>	<p>d. $466 + 226$</p>
<p>e. $537 + 243 = 780$</p>	<p>f. $358 + 443$</p>
<p>g. $753 + 157$</p>	<p>h. $663 + 258$</p>

Name _____

Date _____

1. Solve using vertical form, and draw chips on the place value chart. Bundle as needed.

Place Value

hundreds	tens	ones
0	∞	∞∞∞∞
∞	∞∞∞∞∞ 0	
3	8	4

a. $124 + 260 = \underline{384}$

$$\begin{array}{r} 124 \\ + 260 \\ \hline 384 \end{array} \leftarrow \text{vertical form}$$

hundreds	tens	ones

b. $426 + 324 = \underline{\hspace{2cm}}$

hundreds	tens	ones

c. $362 + 243 = \underline{\hspace{2cm}}$

Name _____

Date _____

1. Solve using vertical form, and draw chips on the place value chart. Bundle as needed.

hundreds	tens	ones

a. $167 + 224 = \underline{\hspace{2cm}}$

Place Value ↓

hundreds	tens	ones
○○○○○○	0	○○○○○○ ○○○
○○	○○○○ ←	○○○○○○
7	6	3

b. $518 + 245 = \underline{763}$

bundle
10 ones
as a ten.

vertical form

$$\begin{array}{r} 518 \\ + 245 \\ \hline 763 \end{array}$$

hundreds	tens	ones

c. $482 + 369 = \underline{\hspace{2cm}}$

* make sure you bundle groups of 10

Name _____

Date _____

1. Solve $435 + 290$ using two different strategies.

a.	b.
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Explain which strategy would be easier and why.

Types of strategies:

- arrow way
- number bond
- vertical form
- place value disks and chart

Name _____

Date _____

1. Solve using mental math.

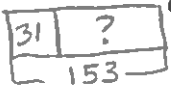
a. $9 - 5 =$ _____ $90 - 50 =$ _____ $190 - 50 =$ _____ $190 - 49 =$ _____

b. $7 - 4 =$ _____ $70 - 40 =$ _____ $370 - 40 =$ _____ $370 - 39 =$ _____

2. Solve using mental math or vertical form with place value disks. Check your work using addition.

a. $153 - 31 =$ 122

b. $153 - 38 =$ _____



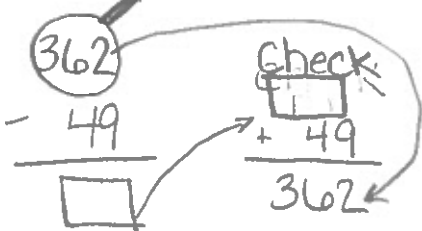
↑
the whole
↓
the part

Put the whole in a magnifying glass.

153	<u>check</u>
- 31	<u>122</u>
122	+ 31
	153

c. $362 - 49 =$ _____

d. $485 - 177 =$ _____



e. $753 - 290 =$ _____

f. $567 - 290 =$ _____

Name _____

Date _____

1. Solve by drawing place value disks on a chart. Then, use addition to check your work.

we don't have enough tens, so we need to break apart a hundred into 10 tens.

<p>a. $373 - 180$</p>	<p>Solve vertically or mentally:</p> $\begin{array}{r} 373 \\ - 180 \\ \hline 193 \end{array}$	<p>Check:</p> $\begin{array}{r} 180 \\ + 193 \\ \hline 373 \end{array}$ <p><i>remember to regroup the tens.</i></p>
<p>b. $463 - 357$</p>	<p>Solve vertically or mentally:</p>	<p>Check:</p>
<p>c. $723 - 584$</p>	<p>Solve vertically or mentally:</p>	<p>Check:</p>

Name _____

Date _____

1. Solve by drawing chips on the place value chart. Then, use addition to check your work. **we need to unbundle*

<p>a. 800 - 675</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">hundreds</th> <th style="width: 33%;">tens</th> <th style="width: 33%;">ones</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"> $\begin{array}{c} \text{O O O O O} \\ \text{O O O} \end{array}$ </td> <td style="text-align: center;"> $\begin{array}{c} \text{O} \\ \text{O O O O O} \\ \text{O O O O O} \end{array}$ </td> <td style="text-align: center;"> $\begin{array}{c} \text{O O O O O} \\ \text{O O O O O} \end{array}$ </td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">5</td> </tr> </tbody> </table>	hundreds	tens	ones	$\begin{array}{c} \text{O O O O O} \\ \text{O O O} \end{array}$	$\begin{array}{c} \text{O} \\ \text{O O O O O} \\ \text{O O O O O} \end{array}$	$\begin{array}{c} \text{O O O O O} \\ \text{O O O O O} \end{array}$	1	2	5	<p>Solve vertically or mentally:</p> $\begin{array}{r} \overset{7}{8} \overset{9}{0} \overset{1}{0} \\ - 675 \\ \hline \boxed{125} \end{array}$	<p>Check:</p> $\begin{array}{r} 675 \\ + \boxed{125} \\ \hline 800 \end{array}$ <p><i>*remember to regroup</i></p>
hundreds	tens	ones									
$\begin{array}{c} \text{O O O O O} \\ \text{O O O} \end{array}$	$\begin{array}{c} \text{O} \\ \text{O O O O O} \\ \text{O O O O O} \end{array}$	$\begin{array}{c} \text{O O O O O} \\ \text{O O O O O} \end{array}$									
1	2	5									
<p>b. 742 - 495</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">hundreds</th> <th style="width: 33%;">tens</th> <th style="width: 33%;">ones</th> </tr> </thead> <tbody> <tr> <td style="height: 100px;"></td> <td></td> <td></td> </tr> </tbody> </table>	hundreds	tens	ones				<p>Solve vertically or mentally:</p>	<p>Check:</p>			
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Name _____

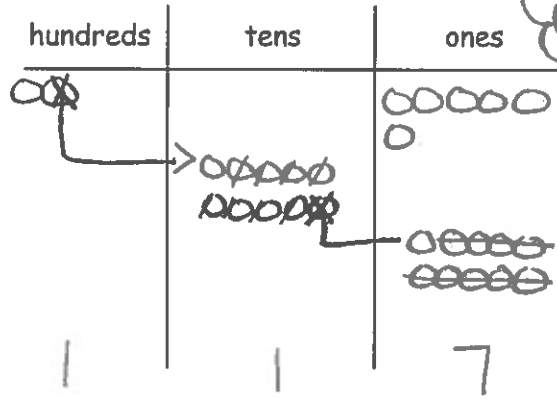
Date _____

1. Solve vertically or using mental math. Draw chips on the place value chart and unbundle, if needed.

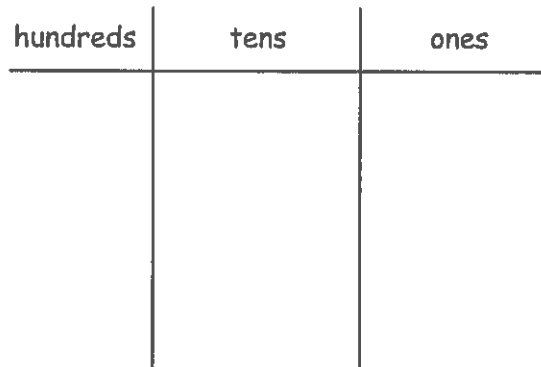
you need to unbundle

a. $206 - 89 = \underline{117}$

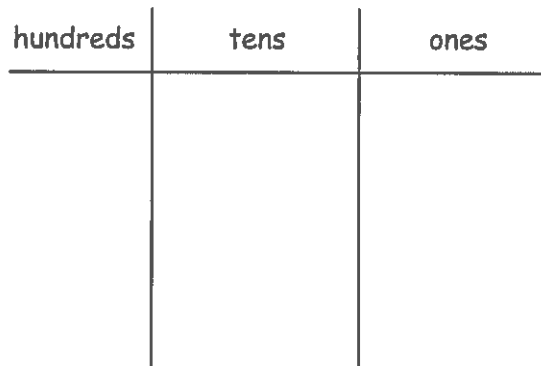
$$\begin{array}{r} \overset{1}{\cancel{2}}\overset{9}{\cancel{0}}6 \\ - 89 \\ \hline 117 \end{array}$$



b. $509 - 371 = \underline{\hspace{2cm}}$



c. $607 - 288 = \underline{\hspace{2cm}}$



Name _____

Date _____

1. Solve vertically or using mental math. Draw chips on the place value chart and unbundle, if needed.

a. $200 - 123 = \underline{\quad 77 \quad}$

$$\begin{array}{r} \cancel{2}00 \\ - 123 \\ \hline 77 \end{array}$$

hundreds	tens	ones
200	00000 00000	00000 00000
	7	7

b. $400 - 219 = \underline{\hspace{2cm}}$

hundreds	tens	ones

c. $700 - 542 = \underline{\hspace{2cm}}$

hundreds	tens	ones

Name _____ Date _____

1. Use the arrow way and counting on to solve. *Start with the smaller number and count on to reach the larger number.*

<p>a. $700 - 462$</p> <p>$462 \xrightarrow{+8} 470 \xrightarrow{+30} 500 \xrightarrow{+200} 700$</p> <p style="text-align: center; margin-top: 20px;">238</p>	<p>b. $900 - 232$</p>
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2. Solve vertically and draw a place value chart and chips. Rename in one step.

<p>a. $907 - 467$</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> $\begin{array}{r} \textcircled{907} \\ - 467 \\ \hline 440 \end{array}$ </div> <div> <table style="border-collapse: collapse; text-align: center;"> <tr> <td style="border-right: 1px solid black; padding: 5px;">H</td> <td style="border-right: 1px solid black; padding: 5px;">T</td> <td style="padding: 5px;">O</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;"> $\begin{array}{c} \text{oooo} \\ \text{pppp} \end{array}$ </td> <td style="border-right: 1px solid black; padding: 5px;"> $\begin{array}{c} \text{ooooo} \\ \text{ppppp} \end{array}$ </td> <td style="padding: 5px;"> $\begin{array}{c} \text{ppppp} \\ \text{pp} \end{array}$ </td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">4</td> <td style="border-right: 1px solid black; padding: 5px;">4</td> <td style="padding: 5px;">0</td> </tr> </table> </div> </div>	H	T	O	$\begin{array}{c} \text{oooo} \\ \text{pppp} \end{array}$	$\begin{array}{c} \text{ooooo} \\ \text{ppppp} \end{array}$	$\begin{array}{c} \text{ppppp} \\ \text{pp} \end{array}$	4	4	0	<p>b. $803 - 667$</p>
H	T	O								
$\begin{array}{c} \text{oooo} \\ \text{pppp} \end{array}$	$\begin{array}{c} \text{ooooo} \\ \text{ppppp} \end{array}$	$\begin{array}{c} \text{ppppp} \\ \text{pp} \end{array}$								
4	4	0								

3. Choose a strategy to solve and explain why you chose that strategy.

<p>a. $700 - 390$</p>	<p>Explanation:</p>
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Name _____

Date _____

Types of strategies

1. Solve and explain why you chose that strategy.

<p>a. $340 + 250 =$ _____</p> $\begin{array}{r} 340 \\ + 250 \\ \hline 590 \end{array}$	<p>Explanation:</p> <p>_____</p> <p>I chose the vertical method because the numbers did not need to be regrouped.</p>
<p>b. $490 + 350 =$ _____</p>	<p>Explanation:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>c. $519 + 342 =$ _____</p>	<p>Explanation:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

- arrow way
- number bond
- vertical form
- place value disks + chart

Name _____

Date _____

Solve each problem using two different strategies.

1. $456 + 244 =$ _____

<p>a. First Strategy</p> <p><u>vertical</u></p> $\begin{array}{r} 456 \\ +244 \\ \hline 700 \end{array}$	<p>b. Second Strategy</p> <p><u>arrow way</u></p> $456 \xrightarrow{+4} 460 \xrightarrow{+40} 500 \xrightarrow{+200} 700$ <p><u>number bond</u></p>
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2. $698 +$ _____ $= 945$

<p>a. First Strategy</p>	<p>b. Second Strategy</p>
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types of strategies

- arrow way
- number bond
- vertical form
- place value disks and chart

Andrzejewski