



Second Grade Math

This packet includes four sections that cover the major content of 2nd grade math. Each section includes multiple pages of notes and practice for each topic. For additional support, visit KCS TV on YouTube for instructional videos that accompany each section.

The following content is included in this packet:

Topic			
I. Geometry	II. Represent Addition and Subtraction Problems	III. Use Place Value to Add and Subtract	IV. Addition and Subtraction with Length
Identify shapes and attributes	Add using words, pictures, equations, or objects	Add and subtract with two-digit numbers	Compare lengths
Tiling Rectangles	Subtract using words, pictures, equations, or objects	Add and subtract with three-digit numbers	Word problems with lengths
Halves, Thirds, and Fourths			Match word problems with equations

Activity Set 3: Use Place Value to Add and Subtract.

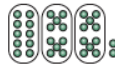
Sid has 32 marbles. Nan has 16 marbles.
How many do they have altogether?

Write 32 and 16 as tens and ones:
3 tens 2 ones and 1 ten 6 ones.


Add the tens first. Then add the ones.

$$\begin{array}{r} 3 \text{ tens} \quad 2 \text{ ones} \\ + 1 \text{ ten} \quad 6 \text{ ones} \\ \hline 4 \text{ tens} \quad 8 \text{ ones} = 48 \end{array}$$

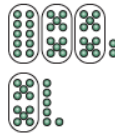
32 marbles




16 marbles




48 marbles



Find $18 + 24$.




1 ten
8 ones




2 tens
4 ones

+



3 tens
12 ones

=

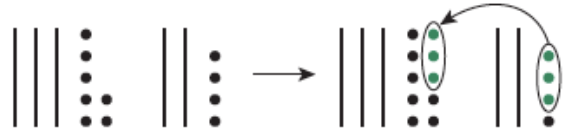


3 tens 12 ones = $30 + 10 + 2$
= $40 + 2$
= 42

They paint 42 pictures.

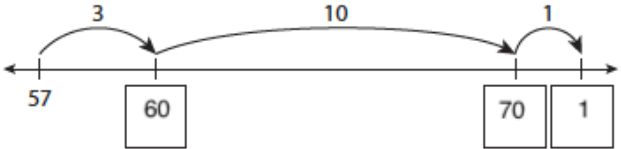
What is $37 + 24$?

$37 + 24$ is the same as $40 + 21$.



$40 + 21 = 61$
So, $37 + 24 = 61$

Fill in the missing numbers in the open number line. Then solve $57 + 14$.




$57 + 14 = \underline{71}$


$50 - 20 = ?$ is the same as $20 + ? = 50$

Write as tens.

2 tens + ? tens = 5 tens
2 tens + 3 tens = 5 tens
 $20 + 30 = 50$
 $50 - 20 = 30$



2 tens



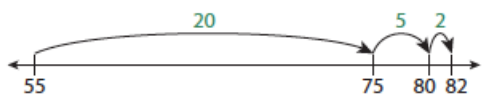
3 tens

A store has 82 hats. There are 55 blue hats.
The rest are red. How many hats are red?

$82 - 55 = \boxed{?}$ is the same as $55 + \boxed{?} = 82$.

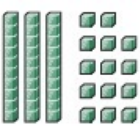
You can add tens first. Then add ones.

$55 + 20 = 75$
 $75 + 5 = 80$
 $80 + 2 = 82$



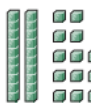
$20 + 5 + 2 = 27$. There are 27 red hats in the store.

Regroup a ten in 44. Fill in the blank.
 $44 = 3$ tens and 14 ones



What is $33 - 18$?


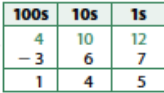
You can regroup a ten first.
Then subtract.



2 tens and 13 ones
 $- 1$ ten and 8 ones
 $\hline 1$ ten and 5 ones = 15

$33 = 2$ tens and 13 ones $33 - 18 = 15$

Activity Set 3: Use Place Value to Add and Subtract.

<p>Solve $227 + 135$.</p> <p>You can make a quick drawing. </p> <p>You can break apart the addends.</p> $\begin{array}{r} 227 \rightarrow 200 + 20 + 7 \\ + 135 \rightarrow 100 + 30 + 5 \\ \hline 300 + 50 + 12 \\ 227 + 135 = 362 \end{array}$	<p>Solve $346 + 487$.</p> <p>You can add hundreds, then tens, then ones.</p> $\begin{array}{r} 346 \\ + 487 \\ \hline 700 \rightarrow 300 + 400 \\ 120 \rightarrow 40 + 80 \\ 13 \rightarrow 6 + 7 \\ 700 + 120 + 13 = 833 \end{array}$ <p>You can add ones, then tens, then hundreds.</p> $\begin{array}{r} 346 \\ + 487 \\ \hline 13 \rightarrow 6 + 7 \\ 120 \rightarrow 40 + 80 \\ 700 \rightarrow 300 + 400 \\ 13 + 120 + 700 = 833 \end{array}$												
<p>Find $512 - 367$.</p> <p>Compare the digits in each place.</p> <p>5 hundreds + 1 ten + 2 ones 3 hundreds + 6 tens + 7 ones</p> <p>$5 > 3$ $1 < 6$ $2 < 7$</p> <p>Regroup 512 two times.</p> $\begin{array}{r} 500 + 10 + 2 \\ = 400 + 100 + 10 + 2 \\ = 400 + 100 + 12 \end{array}$  <p style="text-align: center;">$512 - 367 = 145$</p>	<p>Find $874 - 235$. Look at the ones: 4 ones $<$ 5 ones. Regroup a ten in 874 as 10 ones.</p> <p>$874 = 800 + 70 + 4$, or $800 + 60 + 14$</p> $\begin{array}{r} 800 + 60 + 14 \\ - 200 + 30 + 5 \\ \hline 600 + 30 + 9 = 639 \end{array}$ <p>$874 - 235 = 639$</p>												
<p>Fill in the boxes.</p> $\begin{array}{r} 547 \rightarrow 500 + 40 + 7 \\ + 219 \rightarrow \boxed{200} + \boxed{10} + \boxed{9} \\ \hline 766 \end{array}$ $\boxed{700} + \boxed{50} + \boxed{16}$	<p>Fill in the blanks to find $524 - 335$.</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 5px;">100s</th> <th style="padding: 5px;">10s</th> <th style="padding: 5px;">1s</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">4</td> <td style="padding: 5px;"><input style="width: 30px; height: 30px;" type="text" value="3"/></td> <td style="padding: 5px;">14</td> </tr> <tr> <td style="padding: 5px;">- 3</td> <td style="padding: 5px;">3</td> <td style="padding: 5px;">5</td> </tr> <tr> <td style="padding: 5px;"><input style="width: 30px; height: 30px;" type="text" value="1"/></td> <td style="padding: 5px;"><input style="width: 30px; height: 30px;" type="text" value="0"/></td> <td style="padding: 5px;"><input style="width: 30px; height: 30px;" type="text" value="9"/></td> </tr> </tbody> </table>	100s	10s	1s	4	<input style="width: 30px; height: 30px;" type="text" value="3"/>	14	- 3	3	5	<input style="width: 30px; height: 30px;" type="text" value="1"/>	<input style="width: 30px; height: 30px;" type="text" value="0"/>	<input style="width: 30px; height: 30px;" type="text" value="9"/>
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Activity Set 3: Use Place Value to Add and Subtract.

Practice

$15 + 37 = \underline{\quad}$

$15 = 10 + \square$

$37 = 30 + \square$

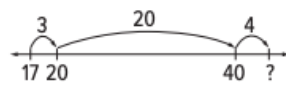
$40 + \square = \square$

$22 - 13 = \underline{\quad}$

$22 - \square = 12$

$12 - 3 = \square$

$17 + 27 = \underline{\quad}$



$31 - 16 = \underline{\quad}$

$31 - \square = 30$

$30 - \square = 20$

$20 - \square = \square$

$47 + 34 = \underline{\quad}$

$47 = 40 + \square$

$34 = \square + 4$

$70 + \square = \square$

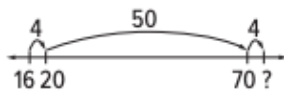
$52 - 14 = \underline{\quad}$

$52 - \square = 42$

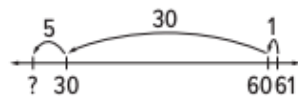
$42 - \square = 40$

$40 - 2 = \square$

$16 + 58 = \underline{\quad}$



$61 - 36 = \underline{\quad}$



$33 - 16 = \underline{\quad}$

$33 - \square = 30$

$30 - \square = 20$

$20 - \square = \square$

$55 + 39 = \underline{\quad}$

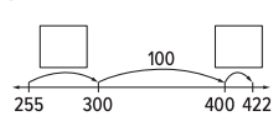
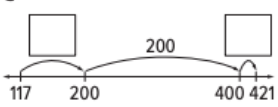
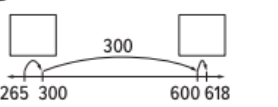
$55 + \square = 60$

$60 + \square = 90$

$90 + \square = \square$

Activity Set 3: Use Place Value to Add and Subtract.

Practice

$136 + \underline{\quad} 281$ $\begin{array}{r} 100 + 30 + 6 \\ \square + \square + \square \\ \hline \square + \square + \square = \square \end{array}$	$318 + \underline{\quad} 153$ $\begin{array}{r} 318 \\ + \square \\ \hline \square \rightarrow 300 + \square \\ \square \rightarrow 10 + \square \\ \square \rightarrow 8 + \square \\ \hline \square \end{array}$																																
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<p>A</p> $\begin{array}{r} 300 + \square + 12 \\ - 100 + 40 + 6 \\ \hline \square + \square + \square = \square \end{array}$ $352 - 146 = \underline{\quad}$	<p>B</p> $\begin{array}{r} 271 \\ - 100 \\ \hline \square \\ - 20 \\ \hline \square \\ - 6 \\ \hline \square \end{array}$ $271 - 126 = \underline{\quad}$																																
<p>C</p>  $422 - 255 = \underline{\quad}$	<p>D</p> <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px 0;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 20%;">Hundreds</th> <th style="width: 20%;">Tens</th> <th style="width: 20%;">Ones</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>14</td> <td>5</td> </tr> <tr> <td></td> <td>-1</td> <td>5</td> <td>5</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> $345 - 155 = \underline{\quad}$		Hundreds	Tens	Ones			14	5		-1	5	5																				
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<p>A</p> $\begin{array}{r} 300 + \square + 11 \\ - 100 + 80 + 5 \\ \hline \square + \square + \square = \square \end{array}$ $391 - 185 = \underline{\quad}$	<p>B</p> $\begin{array}{r} \square + 150 + 5 \\ - 200 + 70 + 4 \\ \hline \square + \square + \square = \square \end{array}$ $755 - 274 = \underline{\quad}$																																
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Activity Set 3: Use Place Value to Add and Subtract.

Answer Key

$$15 + 37 = \underline{52}$$

$$15 = 10 + \boxed{5}$$

$$37 = 30 + \boxed{7}$$

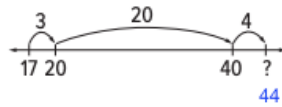
$$40 + \boxed{12} = \boxed{52}$$

$$22 - 13 = \underline{9}$$

$$22 - \boxed{10} = 12$$

$$12 - 3 = \boxed{9}$$

$$17 + 27 = \underline{44}$$



$$31 - 16 = \underline{15}$$

$$31 - \boxed{1} = 30$$

$$30 - \boxed{10} = 20$$

$$20 - \boxed{5} = \boxed{15}$$

16

$$47 + 34 = \underline{81}$$

$$47 = 40 + \boxed{7}$$

$$34 = \boxed{30} + 4$$

$$70 + \boxed{11} = \boxed{81}$$

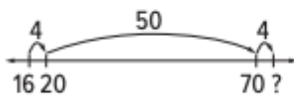
$$52 - 14 = \underline{38}$$

$$52 - \boxed{10} = 42$$

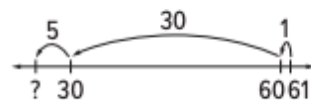
$$42 - \boxed{2} = 40$$

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$$16 + 58 = \underline{74}$$



$$61 - 36 = \underline{25}$$



$$33 - 16 = \underline{17}$$

$$33 - \boxed{3} = 30$$

$$30 - \boxed{10} = 20$$

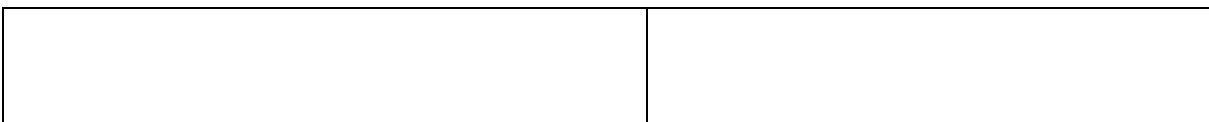
$$20 - \boxed{3} = \boxed{17}$$

$$55 + 39 = \underline{94}$$

$$55 + \boxed{5} = 60$$

$$60 + \boxed{30} = 90$$

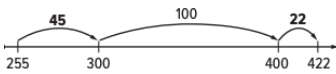
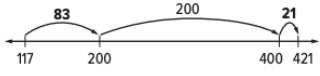
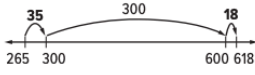
$$90 + \boxed{4} = \boxed{94}$$



Activity Set 3: Use Place Value to Add and Subtract.

Answer Key

$136 + 281$ $\begin{array}{r} 100 + 30 + 6 \\ \hline 200 + 80 + 1 \\ \hline 300 + 110 + 7 = 417 \end{array}$	$318 + 153$ $\begin{array}{r} 318 \\ + 153 \\ \hline 400 \rightarrow 300 + 100 \\ 60 \rightarrow 10 + 50 \\ 11 \rightarrow 8 + 3 \\ \hline 471 \end{array}$																						
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328	3	2	8																				
511	5	1	1																				

<p>A: $300 + 40 + 12$ $\begin{array}{r} - 100 + 40 + 6 \\ \hline 200 + 0 + 6 = 206 \end{array}$ $352 - 146 = 206$</p> <p>B: 271 $\begin{array}{r} - 100 \\ \hline 171 \\ - 20 \\ \hline 151 \\ - 6 \\ \hline 145 \end{array}$ $271 - 126 = 145$</p> <p>C:</p>  <p>$422 - 255 = 167$</p> <p>D:</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr><th>Hundreds</th><th>Tens</th><th>Ones</th></tr> </thead> <tbody> <tr><td>2</td><td>14</td><td>5</td></tr> <tr><td>- 1</td><td>5</td><td>5</td></tr> <tr><td>1</td><td>9</td><td>0</td></tr> </tbody> </table> <p>$345 - 155 = 190$</p>	Hundreds	Tens	Ones	2	14	5	- 1	5	5	1	9	0	<p>A: $300 + 80 + 11$ $\begin{array}{r} - 100 + 80 + 5 \\ \hline 200 + 0 + 6 = 206 \end{array}$ $391 - 185 = 206$</p> <p>B: $600 + 150 + 5$ $\begin{array}{r} - 200 + 70 + 4 \\ \hline 400 + 80 + 1 = 481 \end{array}$ $755 - 274 = 481$</p> <p>C:</p>  <p>$421 - 117 = 304$</p> <p>D:</p>  <p>$618 - 265 = 353$</p> <p>E:</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr><th>Hundreds</th><th>Tens</th><th>Ones</th></tr> </thead> <tbody> <tr><td>4</td><td>9</td><td>15</td></tr> <tr><td>- 3</td><td>6</td><td>8</td></tr> <tr><td>1</td><td>3</td><td>7</td></tr> </tbody> </table> <p>$505 - 368 = 137$</p>	Hundreds	Tens	Ones	4	9	15	- 3	6	8	1	3	7
Hundreds	Tens	Ones																							
2	14	5																							
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Hundreds	Tens	Ones																							
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1	3	7																							

F:

Hundreds	Tens	Ones
7	10	13
- 5	9	5
2	1	8

$813 - 595 = 218$