

ADDITION AND SUBTRACTION UP TO 1000



You are about to start a new math book, about to learn lots of new things, and try a bunch of fun activities and projects. But before we jump in, let's pause and think about our main purpose in doing this... our main purpose in doing everything we do each day.

Colossians 3:17

Whatever you do, in word or deed, do everything in the name of the Lord Jesus, giving thanks to God the Father through him.



Skills Practice for Unit One:

Two-digit addition and subtraction
(see answer key page XX for more details)

It might seem strange to think about completing the math in this book “in the name of the Lord Jesus.” But the Bible tells us that we can bring glory to God through everything we do each day, even the simple things like learning math. Here are three ways we can learn in a way that brings glory to God.

Learn with Joy

Math is a part of creation and all aspects of creation point to the Creator in some way. Learning mathematics is just one step on the journey of discovering more about God. And because of that, we can come to this subject excited, curious to see what new things we will discover.

Learn with Gratitude

Education is a gift, and it is one we should never take for granted. It is a blessing that you have a book and the supplies you need to learn math this year. An even greater blessing is that your parent has committed time to teach you and help you. When we face a difficult lesson or struggle to be motivated on a particular school day, it is good to remind ourselves that it is a privilege to learn and we should be grateful. You can apply what you learn to make the world a better place because you exist!

Learn with Faith

God is for you and ready to help you as you learn math this year. He created all of the math in this book, and He fully understands it. He can help you learn it, too. So, open up this book each school day with faith that God has gone before you and will help you.

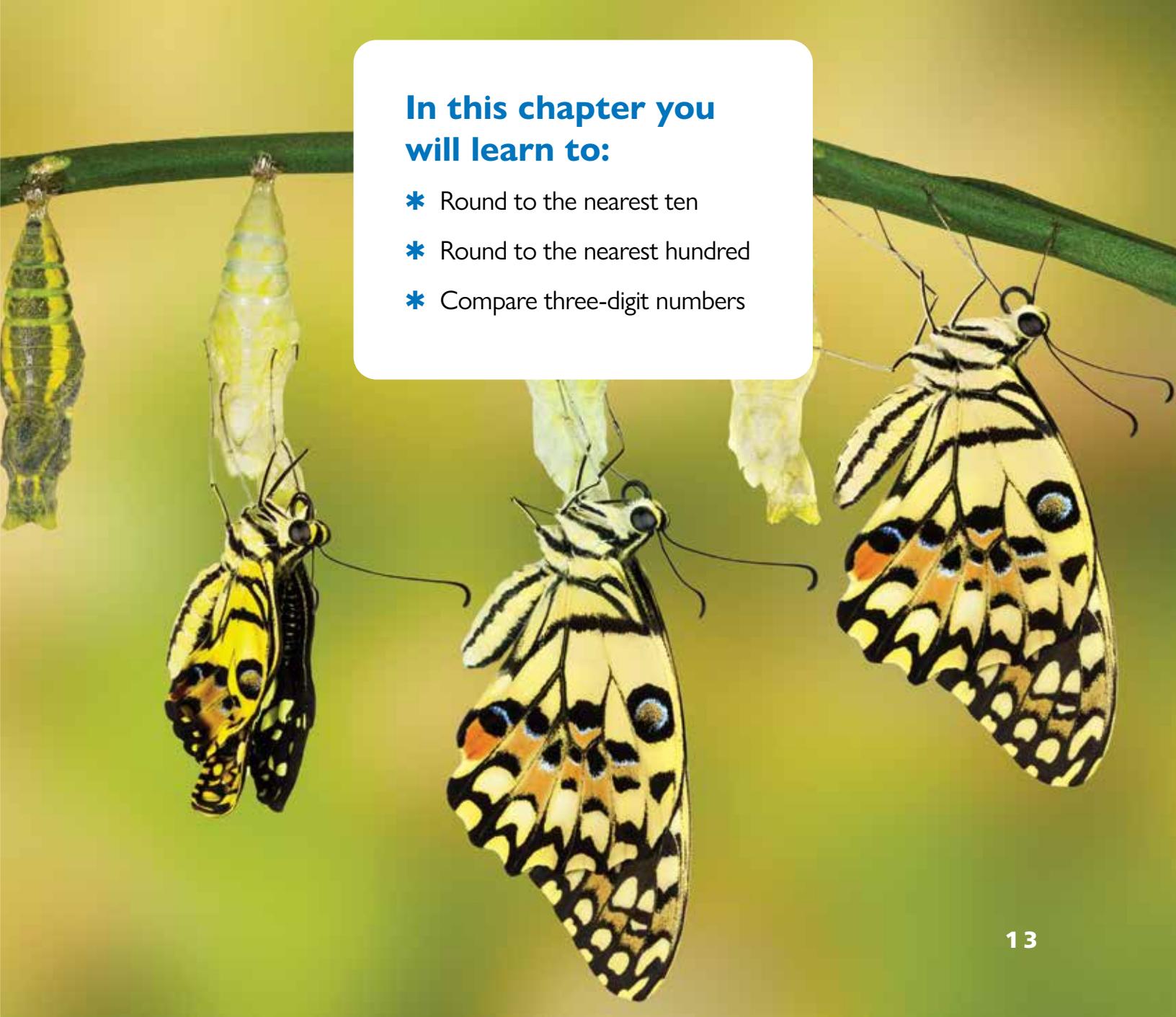
We can bring glory to God in all the small parts of our day. He cares about all the little details and the attitudes in our hearts. Take a moment to pray that God will fill you with joy, gratitude, and faith as you seek to glorify Him this year.

CHAPTER
1

NUMBERS TO 1000

**In this chapter you
will learn to:**

- * Round to the nearest ten
- * Round to the nearest hundred
- * Compare three-digit numbers





RIGHT DIGIT, RIGHT PLACE

You Will Need:

- Paper
- Pencil

You Will Do:

1. Have your parent pick a secret number that is less than 1000 and has no repeated digits. Your job is to guess their number.
2. Write your first guess in the left column.
3. Now your parent looks at your guess. They write down how many digits are correct and then how many of them are in the correct place. The sample gameboard demonstrates this.
4. Continue guessing until you get the number right. If you realize a certain digit definitely isn't in the number, then cross it off at the top. In the example, the student knew that 2, 3 and 7 weren't in the answer.

Sample Gameboard

0	1	2	3	4	5	6	7	8	9
Guess	Digit	Place							
245	1	0							
723	0	0							
518	2	1							
561	3	3							

0	1	2	3	4	5	6	7	8	9
Guess	Digit	Place							

Place Value

Place value is a system where the place of a digit affects its value. If you change the order of the digits, you get a different number. Look at these two examples.

341
three hundred forty-one

Hundreds	Tens	Ones
3	4	1

413
four hundred thirteen

Hundreds	Tens	Ones
4	1	3

Place Value Chart





Practice

Circle the value of the red digit.

590

500 50 5

272

200 20 2

370

700 70 7

486

600 60 6

124

100 10 1

907

700 70 7



Practice

Look at the table of numbers below.
Write the correct number in each blank.

604**929****173****218****316****833****714****296****581****529****972****597**

A number less than 200

A number between 900 and 950

A number with 2 digits the same

A number that has 7 ones

A number that has 7 hundreds

A number with zero tens

A number between 200 and 250

A number that has 8 tens

A number with 3 hundreds

A number that is less than 5 away from 300

A number between 500 and 550

A number with 2 ones



MOVE TO THE NEAREST TEN

You Will Need:

- 5 Pennies or other small objects
- 20 Numbered cards with the numbers 0 to 9 (Uno® Cards work well)

You Will Do:

1. Shuffle the numbered cards and put them in a pile face down. Draw two cards and use the results to make a two-digit number. The order of the digits is up to you.
2. Use the penny to mark the chart below with the number you created.
3. Now slide your penny to the closest tens number. These numbers are highlighted in blue. You may need to slide your piece left or right. If your number ends in a 5, it will be right in the middle of the chart. Slide right to the higher tens number. The numbers 95 to 99 round up to 100.
4. Repeat by drawing pairs of cards 4 more times and following steps 2-3.
5. Have your parent check your answers. Tell them how you made your decisions.

0	1	2	3	4	5	6	7	8	9	10
10	11	12	13	14	15	16	17	18	19	20
20	21	22	23	24	25	26	27	28	29	30
30	31	32	33	34	35	36	37	38	39	40
40	41	42	43	44	45	46	47	48	49	50
50	51	52	53	54	55	56	57	58	59	60
60	61	62	63	64	65	66	67	68	69	70
70	71	72	73	74	75	76	77	78	79	80
80	81	82	83	84	85	86	87	88	89	90
90	91	92	93	94	95	96	97	98	99	100

Rounding to Tens

10

20

30

40

50

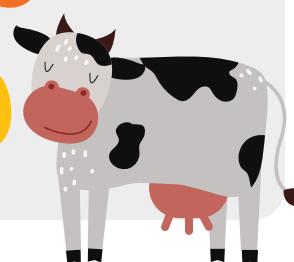
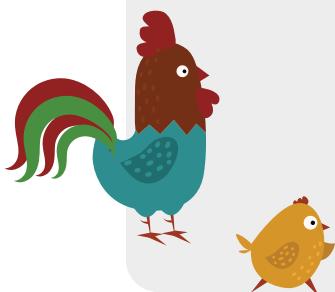
60

70

80

90

100



Rounding: making a number simpler by changing it to another close by number.

Steps for Rounding:

- Underline the digit you are rounding.
- Look at the digit to the right of the underlined digit.
- If it is 5 or above, give it a shove! (round up)
- If it is 4 or below, let it go. (round down)

$$78 \longrightarrow 80$$

And sometimes you will round the number down to the closest ten number.

$$53 \longrightarrow 50$$

How do you know if you should round up or down? If the ones digit is 4, 3, 2, or 1, you should round down to the nearest ten.

$$64 \rightarrow 60$$

$$22 \rightarrow 20$$

$$73 \rightarrow 70$$

$$81 \rightarrow 80$$

If the ones digit is 5 or higher, you round up to the nearest ten.

$$85 \rightarrow 90$$

$$48 \rightarrow 50$$

$$36 \rightarrow 40$$

$$29 \rightarrow 30$$

$$67 \rightarrow 70$$

If your number is between 95 and 99, you round to 100. 100 is a tens number because 10 tens make 100.



Practice

Round each number to the nearest tens number. Then color in the bird with the correct color.

Color Key:

10 = red

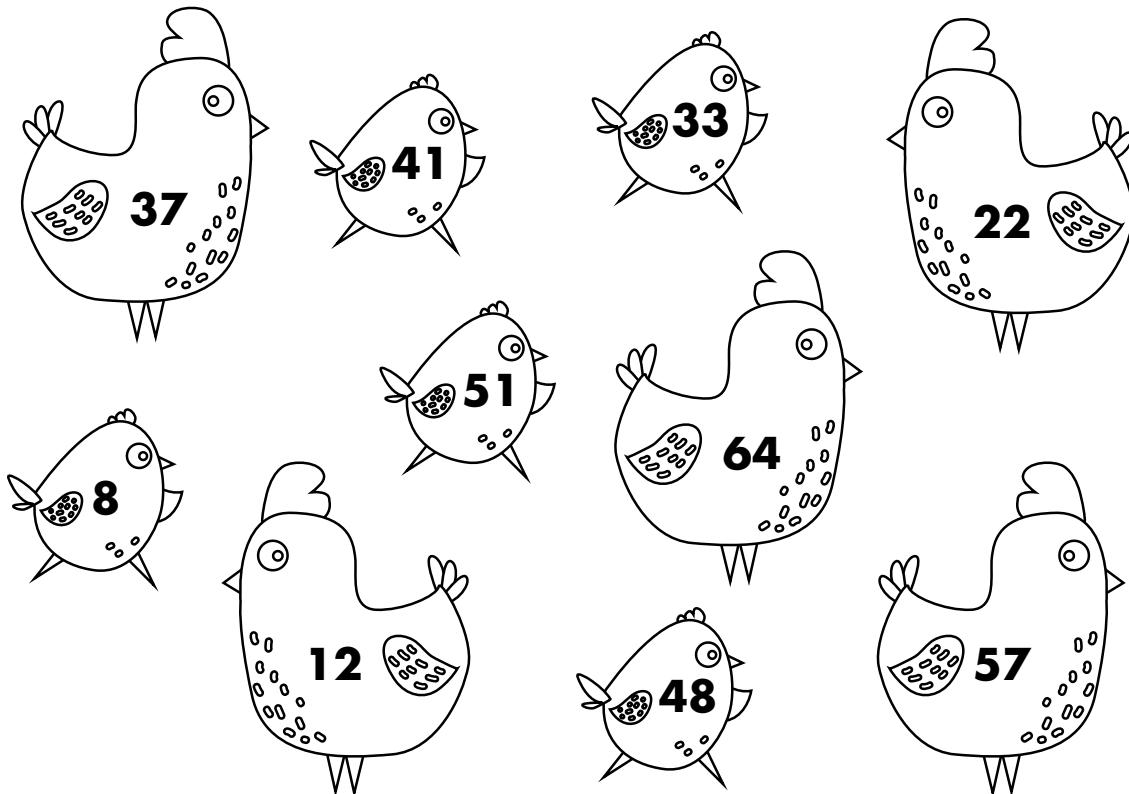
30 = blue

50 = green

20 = orange

40 = purple

60 = yellow



Challenge!

Round 98 to the nearest ten.

Hint: look at the chart in the opening activity.

98 →



ROLL AND ROUND (TO THE NEAREST TEN)

You Will Need:

- A pair of dice
- A colored pencil
- Scratch paper

You Will Do:

1. Roll the dice. Use the numbers on the dice to write down a two-digit number on scratch paper. You can choose the order of the digits.
2. Round the two-digit number to the nearest ten. Color in that space on the game board below.
3. Continue rolling until you are able to color in 5 spaces in a straight line.

10	50	60	60	70
20	40	70	50	50
30	30	10	40	30
40	20	20	30	20
50	10	40	20	10
60	70	60	10	60

Rounding to Hundreds

In the last lesson you learned how to round to the nearest ten. In this lesson we will round to the nearest hundred. The steps are the same, we will just be rounding to a different digit.

Steps for Rounding:

1. Underline the digit you are rounding.
2. Look at the digit to the right of the underlined digit.
3. If it is 5 or above, give it a shove! (round up)
4. If it is 4 or below, let it go. (round down)

Example: Round 431 to the nearest hundred.

First, underline the hundreds digit.

431

Now look to the right of that digit. Is it 5 or above or 4 or below?

431

The digit is a 3, so we will round down to the closest hundred.

400

Example: Round 574 to the nearest hundred.

574

Now look to the right of that digit.

Is it 5 or above or 4 or below?

574

The digit is a 7 so we will round up to the closest hundred.

600

The ones digit
is a 4 but
that doesn't
matter. We
only need to
look at the
tens digit.



Practice

Round each number to the nearest hundred.

264 _____ 350 _____

189 _____ 239 _____

637 _____ 719 _____

Round each number to the position of the digit underlined,
either the nearest 10 or the nearest 100.

652 _____

211 _____

707 _____

652 _____

211 _____

707 _____

The average adult North African ostrich weighs about 245 pounds. Round its weight of 245 to the nearest ten. Round its weight of 245 to the nearest 100.

Nearest ten: _____ pounds

Nearest hundred: _____ pounds





ROUND UP OR ROUND DOWN?

You Will Need:

- Lesson 4 Activity Sheets (in the back of the answer key)
- Scissors

You Will Do:

1. Carefully tear out your Round Up or Round Down mat from the back of the answer key. Then tear out the Round to the Nearest Ten sheet and cut apart the two-digit numbers.
2. Practice sorting them on the mat according to whether you'd round them up or down to the nearest ten. Check your answers with your parent.
3. Carefully tear out the Round to the Nearest Hundred sheet and cut apart the three-digit numbers.
4. Practice sorting them on the mat according to whether you'd round them up or down to the nearest hundred. Check your answers with your parent.

Lesson 4: Round to the Nearest Ten Card

22	37	8
11	19	2
36	33	
74	65	

Lesson 4: Activity Sheet

ROUND UP OR ROUND DOWN!

Steps for Rounding:

- Underline the digit you are rounding to.
- Look at the digit to the right of the underlined digit.
- If it is 5 or above, go up (round up).
- If it is 4 or below, let it go (round down).

ROUND DOWN

ROUND UP

Lesson 4: Round to the Nearest Hundred Cards

313	491	829
198	380	201
722	661	418
469	821	545



Practice

Round each number to the nearest ten.

$36 \underline{\hspace{2cm}}$

$409 \underline{\hspace{2cm}}$

$72 \underline{\hspace{2cm}}$

$278 \underline{\hspace{2cm}}$

$89 \underline{\hspace{2cm}}$

$531 \underline{\hspace{2cm}}$

$42 \underline{\hspace{2cm}}$

$982 \underline{\hspace{2cm}}$

$66 \underline{\hspace{2cm}}$

$713 \underline{\hspace{2cm}}$

Round each number to the nearest hundred.

$411 \underline{\hspace{2cm}}$

$309 \underline{\hspace{2cm}}$

$789 \underline{\hspace{2cm}}$

$711 \underline{\hspace{2cm}}$

$517 \underline{\hspace{2cm}}$

$650 \underline{\hspace{2cm}}$

$561 \underline{\hspace{2cm}}$

$467 \underline{\hspace{2cm}}$

$245 \underline{\hspace{2cm}}$

$384 \underline{\hspace{2cm}}$



ROLL AND ROUND (TO THE NEAREST HUNDRED)

You Will Need:

- 3 dice
- Colored pencils
- Two players



You Will Do:

1. Player 1 rolls the dice and uses the numbers on the dice to make a three-digit number. Player 1 can choose the order of the digits.
2. Player 1 rounds the three-digit number to the nearest hundred and colors in that space on the game board below.
3. Player 2 rolls the dice and makes a three-digit number. Player 2 can choose the order of the digits.
4. Player 2 rounds the three-digit number to the nearest hundred and colors in that space on the game board below.
5. The players continue to take turns rolling, rounding, and coloring in spaces. The first player to color in 5 spaces in a row, column, or diagonal wins. If there are no spaces available to color, the player's turn is over.

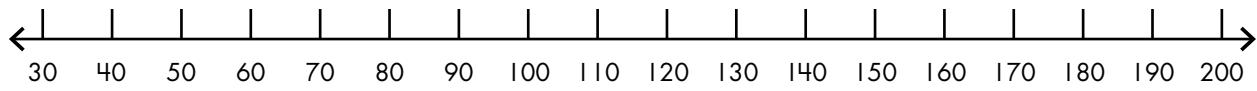
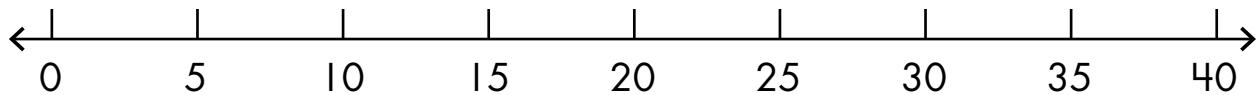
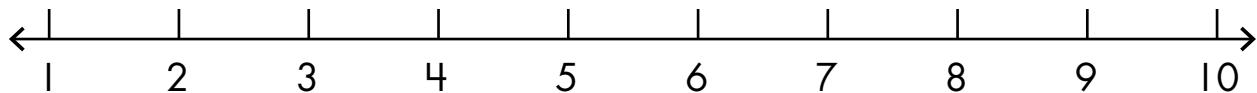
100	500	600	600	700
200	400	700	500	500
300	300	100	400	300
400	200	200	300	200
500	600	400	200	100



Number line:
A line with evenly spaced numbers on it.

Number Lines

A **number line** is one way we can picture the order of numbers. Number lines can increase by 1's, 5's, 10's, or another consistent amount. They always increase by the same amount each time. Look at the examples of number lines below.

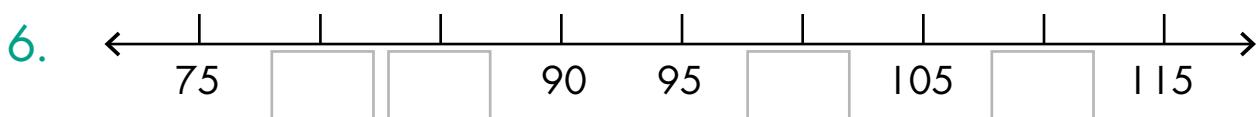
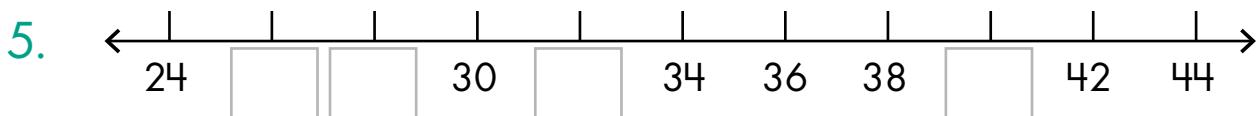
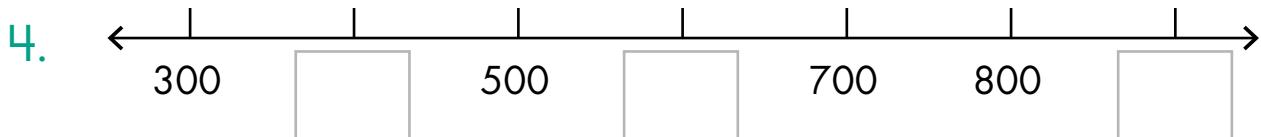
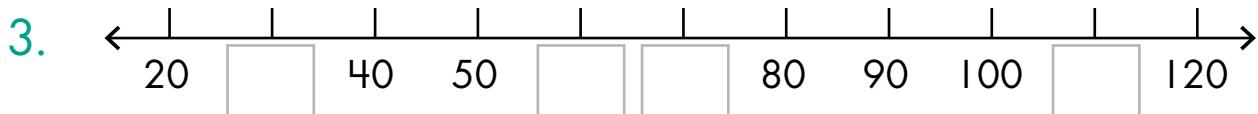
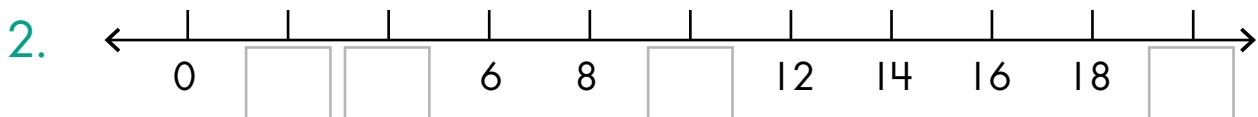
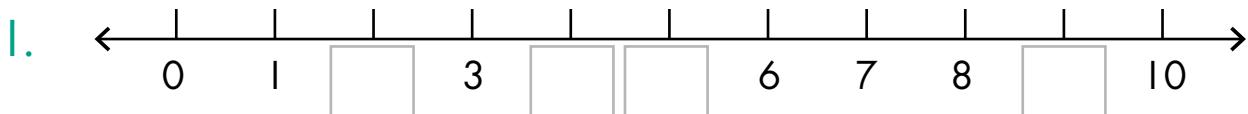


Number lines don't always start at zero. They can start at any number as long as they increase by the same amount each time.



Practice

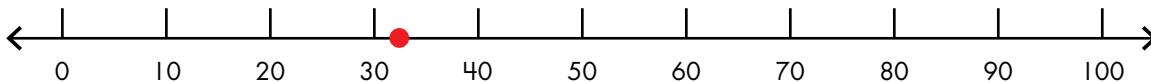
Look at each number line and determine how it is increasing. Fill in the missing numbers on each number line.





Practice

Draw a dot on the number line showing where each number would be located. Then round the number to the nearest ten. The first one has been done for you.



32 _____

30

57 _____

48 _____

28 _____

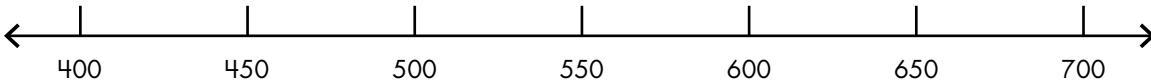
71 _____

17 _____

65 _____

13 _____

Draw a dot on the number line showing where each number would be located. Then round the number to the nearest hundred.



413 _____

464 _____

678 _____

530 _____

649 _____

562 _____



BUILD AND COMPARE

You Will Need:

- Base ten blocks

You Will Do:

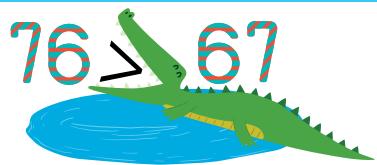
1. We are going to decide which of the three-digit numbers below is greater.
2. Start by building each number with base ten blocks.
3. Compare the two sets of blocks. Which one represents more cubes?
4. Circle the greater number.



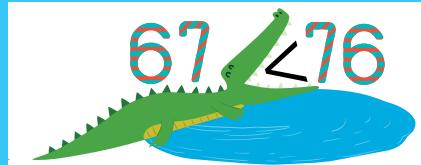
217

231

Comparing Numbers



76 > 67



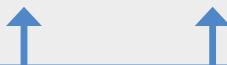
67 < 76

When we compare numbers, we use symbols to show that one number is greater than, less than, or equal to another number. Review these three math symbols below.

422 > 205	119 < 780	645 = 645
422 is greater than 205.	119 is less than 780.	645 is equal to 645.

Remember that when we compare numbers, we look at the digits in the greatest place first. If we are comparing three-digit numbers, we start by comparing the hundreds digit.

$$614 > 234$$

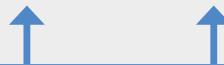


Compare the digits in the hundreds place.

“614 is greater than 234”

If the hundreds digits are the same, we then compare the tens digits.

$$821 < 875$$

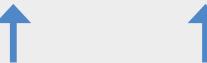


Compare the digits in the tens place.

“821 is less than 875”

We only compare the ones digits if the hundreds and the tens digits are the same.

$$219 > 212$$



Compare the digits in the ones place.

“219 is greater than 212”



Practice

Compare each of the numbers below.
Write in the $>$, $<$, or $=$ symbol.

487

103

920

980

278

336

334

327

273

273

872

693

145

541

166

167

The chart below shows which birds were spotted on Hawk Mountain in the fall of 2018. Put the birds in order from least frequently seen to the most frequently seen by writing their names in the correct order on the lines below.

Type of bird	Bird count
Bald Eagle	541
Blue Jay	980
Turkey Vulture	543
Cooper's Hawk	591



Hawk Mountain Sanctuary is in Berks County, Pennsylvania.



Mixed Review



Skills Check

You should have been practicing adding two-digit numbers each day as part of your skills practice. Here are a few more for you to try.

$$\begin{array}{r} 45 \\ + 23 \\ \hline \end{array} \quad \begin{array}{r} 28 \\ + 22 \\ \hline \end{array} \quad \begin{array}{r} 67 \\ + 19 \\ \hline \end{array}$$

Round each number to the nearest ten.

46 _____

61 _____

893 _____

377 _____

Round each number to the nearest hundred.

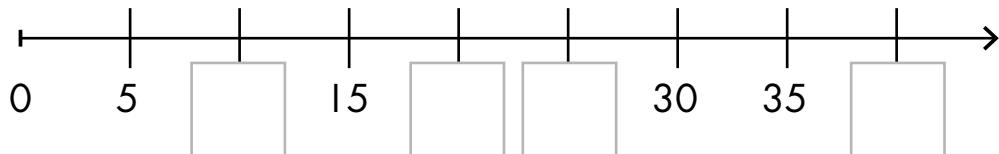
516 _____

298 _____

607 _____

751 _____

Look at the number line and fill in the missing numbers.



Compare each of the numbers below. Write in the $>$, $<$, or $=$ symbol.

197 179

303 278

CHAPTER
2

ADDING AND SUBTRACTING WITHIN 1000



**In this chapter
you will learn
to:**

- * Estimate Sums and Differences
- * Add and Subtract with Regrouping
- * Solve Addition and Subtraction word problems



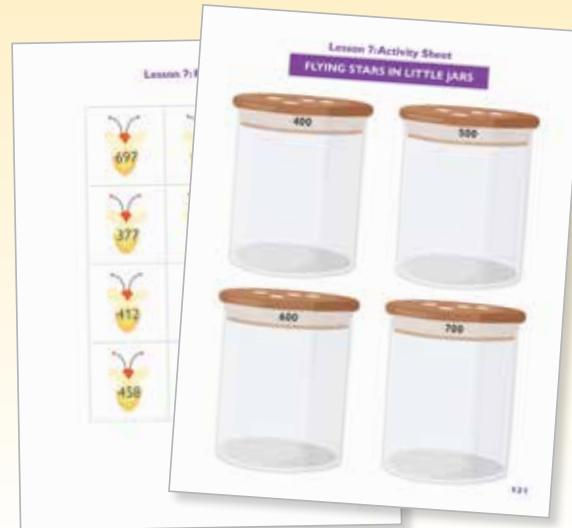
FLYING STARS IN LITTLE JARS

You Will Need:

- Lesson 7 Activity Sheets (in the back of the answer key)
- Scissors
- Glue

You Will Do:

Cut out each of the numbered firefly cards. Put each firefly in the correct jar by rounding the number to the nearest hundred.



Estimating Sums



Estimation:

A thoughtful guess that is close to the right answer but not exact.

Rounding numbers to the nearest ten or hundred can make it easier to add them together. When you do this, you can find an **estimation** of the sum. An estimate is not an exact answer, but it gives us a good idea of what the answer will be.

Mathematicians use estimations to find answers quickly, especially when an exact answer isn't really needed. Ask your parent if they ever round numbers and estimate instead of calculating the exact answer.

Here is an example of rounding to the nearest ten before adding. The answer is an estimation.

Example	Estimate	Exact Answer
$ \begin{array}{r} 63 \\ +16 \\ \hline \end{array} $	$ \begin{array}{r} 60 \\ +20 \\ \hline 80 \end{array} $	$ \begin{array}{r} 63 \\ +16 \\ \hline 79 \end{array} $

If you add 63 and 16, the answer is 79. You can see that 80 is very close to the exact answer.

Here is an example of rounding to the nearest hundred before adding. The answer is an estimation.

Example	Estimate	Exact Answer
$ \begin{array}{r} 476 \\ +105 \\ \hline \end{array} $	$ \begin{array}{r} 500 \\ +100 \\ \hline 600 \end{array} $	$ \begin{array}{r} 476 \\ +105 \\ \hline 581 \end{array} $

All estimations will be slightly different from the exact answer. They just give an approximation. If you round to the nearest ten, the estimate will be closer to the exact answer than if you round to the nearest hundred. Because of this, you might want to round three-digit numbers to the nearest ten sometimes to get a better estimate.

Example: Round to the nearest ten to estimate the sum.

Example	Estimate	Exact Answer
$ \begin{array}{r} 476 \\ +105 \\ \hline \end{array} $	$ \begin{array}{r} 480 \\ +110 \\ \hline 590 \end{array} $	$ \begin{array}{r} 476 \\ +105 \\ \hline 581 \end{array} $

The exact answer to this problem is 581, so the second estimation is closer than the first estimation.



Practice

Round each number to the nearest ten.
Then estimate the sum.

1.

$$\begin{array}{r} 46 \rightarrow \boxed{} \\ +31 \rightarrow + \boxed{} \\ \hline \boxed{} \end{array}$$

2.

$$\begin{array}{r} 75 \rightarrow \boxed{} \\ +11 \rightarrow + \boxed{} \\ \hline \boxed{} \end{array}$$

3.

$$\begin{array}{r} 51 \rightarrow \boxed{} \\ +16 \rightarrow + \boxed{} \\ \hline \boxed{} \end{array}$$

4.

$$\begin{array}{r} 21 \rightarrow \boxed{} \\ +19 \rightarrow + \boxed{} \\ \hline \boxed{} \end{array}$$

5.

$$\begin{array}{r} 28 \rightarrow \boxed{} \\ +34 \rightarrow + \boxed{} \\ \hline \boxed{} \end{array}$$

6.

$$\begin{array}{r} 27 \rightarrow \boxed{} \\ +36 \rightarrow + \boxed{} \\ \hline \boxed{} \end{array}$$

7.

$$\begin{array}{r} 519 \rightarrow \boxed{} \\ +256 \rightarrow + \boxed{} \\ \hline \boxed{} \end{array}$$

8.

$$\begin{array}{r} 501 \rightarrow \boxed{} \\ +372 \rightarrow + \boxed{} \\ \hline \boxed{} \end{array}$$

9.

$$\begin{array}{r} 488 \rightarrow \boxed{} \\ +235 \rightarrow + \boxed{} \\ \hline \boxed{} \end{array}$$



Practice

Round each number to the nearest hundred.
Then estimate the sum.

1.

$$826 \rightarrow \boxed{}$$

$$\begin{array}{r} +112 \rightarrow + \boxed{} \\ \hline \end{array}$$

2.

$$446 \rightarrow \boxed{}$$

$$\begin{array}{r} +225 \rightarrow + \boxed{} \\ \hline \end{array}$$

3.

$$704 \rightarrow \boxed{}$$

$$\begin{array}{r} +155 \rightarrow + \boxed{} \\ \hline \end{array}$$

4.

$$551 \rightarrow \boxed{}$$

$$\begin{array}{r} +243 \rightarrow + \boxed{} \\ \hline \end{array}$$

5.

$$717 \rightarrow \boxed{}$$

$$\begin{array}{r} +109 \rightarrow + \boxed{} \\ \hline \end{array}$$

6.

$$221 \rightarrow \boxed{}$$

$$\begin{array}{r} +317 \rightarrow + \boxed{} \\ \hline \end{array}$$

The arctic tern migrates farther each year than any other animal. It travels back and forth between Greenland and Antarctica each year.

Suppose an arctic tern flew 215 miles on the first day of its migration and about 278 miles the second day. About how far did it fly altogether?





ESTIMATE AND MATCH

You Will Do:

This activity requires you to estimate numbers to the nearest hundred and then add them together without writing the estimations down. You can do this! When you figure out the estimated sum, draw a line connecting the addition fact to the best estimation of the sum.

411

+178

300

223

+119

800

451

+312

600

182

+193

700

298

+387

400

Adding Three-Digit Numbers in Expanded Form

In this lesson you will estimate sums first and then find the exact answer. Comparing the answer with your estimation can help you catch a mistake.

One strategy for adding three-digit numbers is to add them in expanded form. This makes it easier to make sure you are adding the hundreds to the hundreds, tens to the tens, and ones to the ones. Look at these example:

Example	Estimate	Expanded Form
$ \begin{array}{r} 713 \\ +164 \\ \hline 900 \end{array} $	$ \begin{array}{r} 700 \\ +200 \\ \hline 900 \end{array} $	$ \begin{array}{r} 700 + 10 + 3 \\ \underline{100 + 60 + 4} \\ 800 + 70 + 7 = 877 \end{array} $

Notice that the answer is close to our estimate. In fact, if you rounded it to the nearest hundred, you would get the estimate. You can feel confident that your answer is correct!

Remember that sometimes when you add, you will need to regroup. Look at this example:

Example	Estimate	Expanded Form
$ \begin{array}{r} 292 \\ +443 \\ \hline 700 \end{array} $	$ \begin{array}{r} 300 \\ +400 \\ \hline 700 \end{array} $	$ \begin{array}{r} 200 + 90 + 2 \\ \underline{400 + 40 + 3} \\ 600 + 130 + 5 = 735 \end{array} $

Again, recognize that if you rounded the answer, you would get your estimated number. You can be confident that you added correctly!



Practice

For each problem first estimate the sum. Then add the numbers in expanded form to find the exact answer.

1. Estimate: _____ + _____ = _____

654	_____ + _____ + _____
<u>+ 303</u>	_____ + _____ + _____ _____
	_____ + _____ + _____ = _____

2. Estimate: _____ + _____ = _____

315	_____ + _____ + _____
<u>+ 514</u>	_____ + _____ + _____ _____
	_____ + _____ + _____ = _____

3. Estimate: _____ + _____ = _____

566	_____ + _____ + _____
<u>+ 313</u>	_____ + _____ + _____ _____
	_____ + _____ + _____ = _____

4. Estimate: _____ + _____ = _____

632	_____ + _____ + _____
<u>+ 214</u>	_____ + _____ + _____ _____
	_____ + _____ + _____ = _____

5. Estimate: _____ + _____ = _____

819	_____ + _____ + _____
<u>+ 115</u>	_____ + _____ + _____ _____
	_____ + _____ + _____ = _____

6. Estimate: _____ + _____ = _____

220	_____ + _____ + _____
<u>+ 489</u>	_____ + _____ + _____ _____
	_____ + _____ + _____ = _____



Practice

For each problem first estimate the sum. Then add the numbers in expanded form to find the exact answer.

7. Estimate: _____ + _____ = _____

141	_____ + _____ + _____
<u>+ 293</u>	_____ + _____ + _____ _____
	_____ + _____ + _____ = _____

374 people visited the harvest festival on Saturday. 285 people visited on Sunday. How many people visited altogether?

Estimate: _____ + _____ = _____

_____ + _____ + _____
_____ + _____ + _____ _____
_____ + _____ + _____ = _____

ROLL AND ADD



You Will Need:

- Numbered cards (such as Uno cards)
- A piece of scratch paper

You Will Do:

1. Pick 3 numbered cards to create a three-digit number. Write it down in the left hand column below.
2. Pick 3 more cards to create a second three-digit number. Write it in the left hand column below.
3. Round each number to the nearest hundred and estimate the sum. Write it down in your Estimate section below.
4. Add the numbers together by rewriting them in expanded form. Check your answer against your estimation.



<p>Estimate</p> <hr/> <hr/> <hr/> <p style="text-align: center;">+ _____</p>	<p>Expanded Form</p> <hr/> <hr/> <hr/> <p style="text-align: center;">+ + _____ + _____ + _____ _____ + _____ + _____ = _____</p>
--	--

Adding Three-Digit Numbers in the Vertical Format

In this lesson we will review how to add three-digit numbers in the vertical format. This method is when we line up the hundreds, tens, and ones to make it easier to keep track of regrouping. When we regroup in this format, we write the new ten or hundred as a 1 above the problem. Let's look at an example.

Example: $195 + 362$

Estimate: $200 + 400 = 600$

Step One:

Add up the ones.

$$\begin{array}{r} & 1 & 9 & 5 \\ + & 3 & 6 & 2 \\ \hline & & & 7 \end{array}$$

Step Two:

Add up the tens.
Regroup if necessary.

$$\begin{array}{r} | & & \\ & 1 & 9 & 5 \\ + & 3 & 6 & 2 \\ \hline & & 5 & 7 \end{array}$$

Step Three:

And now add the hundreds column.

$$\begin{array}{r} | & & \\ & 1 & 9 & 5 \\ + & 3 & 6 & 2 \\ \hline & 5 & 5 & 7 \end{array}$$

Finally, compare your answer to your estimate.

557 is close to 600.



Practice

For each problem first estimate the sum and write it down. Then add the numbers in the vertical format to find the exact answer.

1.

Estimate _____

$$\begin{array}{r} & 8 & 1 & 1 \\ + & 1 & 9 & 5 \\ \hline & & & \end{array}$$

2.

Estimate _____

$$\begin{array}{r} & 4 & 1 & 9 \\ + & 3 & 8 & 5 \\ \hline & & & \end{array}$$

3.

Estimate _____

$$\begin{array}{r} & 4 & 7 & 0 \\ + & 3 & 6 & 6 \\ \hline & & & \end{array}$$

4. _____
Estimate

$$\begin{array}{r} 1 & 2 & 7 \\ + & 2 & 5 & 2 \\ \hline \end{array}$$

5. _____
Estimate

$$\begin{array}{r} 6 & 3 & 1 \\ + & 2 & 3 & 0 \\ \hline \end{array}$$

6. _____
Estimate

$$\begin{array}{r} 8 & 1 & 7 \\ + & 2 & 4 & 8 \\ \hline \end{array}$$

7. _____
Estimate

$$\begin{array}{r} 2 & 2 & 7 \\ + & 3 & 5 & 4 \\ \hline \end{array}$$

8. _____
Estimate

$$\begin{array}{r} 1 & 6 & 5 \\ + & 2 & 5 & 4 \\ \hline \end{array}$$

9. _____
Estimate

$$\begin{array}{r} 2 & 1 & 6 \\ + & 1 & 5 & 4 \\ \hline \end{array}$$

The Smith family drove 139 miles from Topeka to Wichita. They then drove another 155 miles from Wichita to Dodge City. How many miles did they drive altogether? Use the vertical method or expanded form to solve.





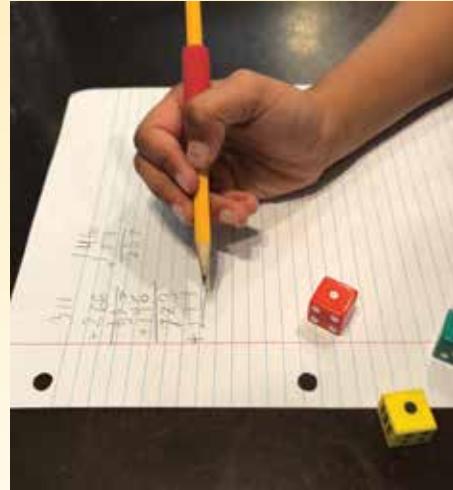
RACE TO 1000

You Will Need:

- 3 dice
- Scratch paper
- Pencil

You Will Do:

1. Roll the dice and put the numbers in any order you like to make a three-digit number.
2. Roll again, make a three-digit number and add this to your first number.
3. Continue rolling and adding to your previous number until you reach 1000 or higher. How many rolls does it take you?



Challenge:

Can you think of a way to arrange the numbers on the dice each time to make the least number of rolls needed to reach 1000?

Adding Three-Digit Numbers in the Vertical Format with Double Regrouping

In the last lesson we reviewed how to add in the vertical format. Sometimes you will need to regroup twice when adding three-digit numbers. Look at the example below.

Example: $478 + 246$

Estimate: $500 + 200 = 700$

Step One:
Add the ones. $8 + 6 = 14$
We will regroup this as 1 ten and 4 ones.

			4
			7
			8
+			2
<hr/>			4
			6
			4

Step Two:

Add up the tens.

$$1 + 7 + 4 = 12$$

12 tens is the same as
1 hundred and 2 tens.**Step Three:**And now add the
hundreds column.

4	7	8
2	4	6
		2

4	7	8
2	4	6
		7

Finally, compare your answer to your estimate.**724 is close to 700, so you can be confident that your answer is correct!**

The vertical format can also make it easier for us to add up three three-digit numbers. Look at the example.

Example: $111 + 496 + 178$ Estimate: $100 + 500 + 200 = 800$ **Step One:**
Add the ones**Step Two:**
Add the tens.**Step Three:**
Add the hundreds.

1	1	1
4	9	6
+ 1	7	8
		5

1	1	1
4	9	6
+ 1	7	8
		8

1	1	1
4	9	6
+ 1	7	8
		7

Finally, compare your answer to your estimate. 785 is close to 800.



Practice

For each problem first estimate the sum. Then add the numbers in the vertical format to find the exact answer.

1. _____
Estimate

$$\begin{array}{r} 3 & 7 & 1 \\ + & 2 & 9 & 5 \\ \hline \end{array}$$

2. _____
Estimate

$$\begin{array}{r} 4 & 9 & 9 \\ + & 2 & 6 & 5 \\ \hline \end{array}$$

3. _____
Estimate

$$\begin{array}{r} 4 & 0 & 1 \\ + & 2 & 7 & 9 \\ \hline \end{array}$$

4. _____
Estimate

$$\begin{array}{r} 3 & 9 & 0 \\ + & 4 & 1 & 4 \\ \hline \end{array}$$

5. _____
Estimate

$$\begin{array}{r} 5 & 2 & 6 \\ + & 1 & 7 & 5 \\ \hline \end{array}$$

6. _____
Estimate

$$\begin{array}{r} 3 & 4 & 2 \\ + & 5 & 7 & 8 \\ \hline \end{array}$$

7. _____
Estimate

$$\begin{array}{r} 4 & 1 & 2 \\ + & 1 & 2 & 9 \\ \hline \end{array}$$

8. _____
Estimate

$$\begin{array}{r} 2 & 0 & 3 \\ + & 3 & 9 & 9 \\ \hline \end{array}$$

9. _____
Estimate

$$\begin{array}{r} 1 & 7 & 7 \\ + & 2 & 8 & 6 \\ \hline \end{array}$$

10. _____
Estimate

$$\begin{array}{r} 8 & 2 & 1 \\ + & 1 & 4 & 5 \\ \hline \end{array}$$

11. _____
Estimate

$$\begin{array}{r} 3 & 2 & 7 \\ + & 2 & 8 & 5 \\ \hline \end{array}$$

12. _____
Estimate

$$\begin{array}{r} 2 & 9 & 9 \\ + & 3 & 4 & 8 \\ \hline \end{array}$$

13. _____
Estimate

$$\begin{array}{r} 1 & 7 & 0 \\ 1 & 0 & 2 \\ + & 7 & 7 & 6 \\ \hline \end{array}$$

14. _____
Estimate

$$\begin{array}{r} 3 & 2 & 7 \\ 1 & 9 & 8 \\ + & 1 & 4 & 1 \\ \hline \end{array}$$

15. _____
Estimate

$$\begin{array}{r} 1 & 0 & 9 \\ 2 & 2 & 2 \\ + & 1 & 3 & 4 \\ \hline \end{array}$$

Sarah read 134 pages during the first week of a read-a-thon. She read twice that many during the second week. How many pages did she read total during the first and second weeks?



ROLL AND PLOT

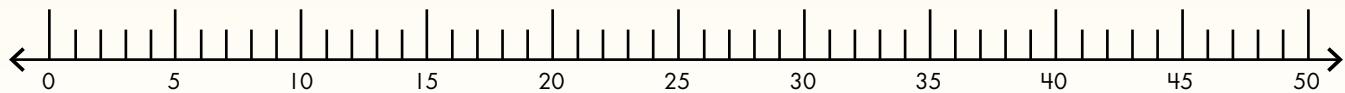
You Will Need:

- Numbered cards 0 to 5 (such as Uno cards)

You Will Do:

1. Pick two cards and arrange them in any order to create a two-digit number.
2. Write your number in one of the spaces below.
3. Plot your number with a dot on the number line. Repeat 5 more times. Then have your parent check your answers.





Estimating Differences

In the last few lessons you learned how to round numbers and estimate sums. In this lesson you will practice rounding so you can estimate the difference between two numbers. Remember that if you are finding the difference, you will be using your subtraction skills.

Here is an example of rounding to the nearest ten before subtracting. The answer is an estimation. Notice that it is close to the exact answer.

Example:

Example	Estimate	Exact Answer
$\begin{array}{r} 78 \\ - 19 \\ \hline \end{array}$	$\begin{array}{r} 80 \\ - 20 \\ \hline 60 \end{array}$	$\begin{array}{r} 78 \\ - 19 \\ \hline 59 \end{array}$

Here is an example of rounding to the nearest hundred before subtracting.

The answer is an estimation.

Example	Estimate	Exact Answer
$\begin{array}{r} 506 \\ - 378 \\ \hline \end{array}$	$\begin{array}{r} 500 \\ - 400 \\ \hline 100 \end{array}$	$\begin{array}{r} 506 \\ - 378 \\ \hline 128 \end{array}$



Practice

Round each number to the nearest ten. Then estimate the difference.

1.

$$\begin{array}{r} 42 \\ \rightarrow \\ \boxed{} \end{array}$$

$$\begin{array}{r} - 24 \\ \hline \end{array} \rightarrow \begin{array}{r} \\ \hline \end{array}$$

2.

$$\begin{array}{r} 83 \\ \rightarrow \\ \boxed{} \end{array}$$

$$\begin{array}{r} - 13 \\ \hline \end{array} \rightarrow \begin{array}{r} \\ \hline \end{array}$$

3.

$$\begin{array}{r} 74 \\ \rightarrow \\ \boxed{} \end{array}$$

$$\begin{array}{r} - 29 \\ \hline \end{array} \rightarrow \begin{array}{r} \\ \hline \end{array}$$

4.

$$\begin{array}{r} 56 \\ \rightarrow \\ \boxed{} \end{array}$$

$$\begin{array}{r} - 28 \\ \hline \end{array} \rightarrow \begin{array}{r} \\ \hline \end{array}$$

5.

$$\begin{array}{r} 71 \\ \rightarrow \\ \boxed{} \end{array}$$

$$\begin{array}{r} - 18 \\ \hline \end{array} \rightarrow \begin{array}{r} \\ \hline \end{array}$$

6.

$$\begin{array}{r} 78 \\ \rightarrow \\ \boxed{} \end{array}$$

$$\begin{array}{r} - 32 \\ \hline \end{array} \rightarrow \begin{array}{r} \\ \hline \end{array}$$

Round each number to the nearest hundred. Then estimate the difference.

7.

$$\begin{array}{r} 698 \\ \rightarrow \\ \hline \end{array}$$

$$\begin{array}{r} - 103 \\ \hline \end{array} \rightarrow \begin{array}{r} \\ \hline \end{array}$$

8.

$$\begin{array}{r} 826 \\ \rightarrow \\ \hline \end{array}$$

$$\begin{array}{r} - 469 \\ \hline \end{array} \rightarrow \begin{array}{r} \\ \hline \end{array}$$

9.

$$\begin{array}{r} 504 \\ \rightarrow \\ \hline \end{array}$$

$$\begin{array}{r} - 275 \\ \hline \end{array} \rightarrow \begin{array}{r} \\ \hline \end{array}$$

10.

$$\begin{array}{r} 988 \\ \rightarrow \\ \hline \end{array}$$

$$\begin{array}{r} - 321 \\ \hline \end{array} \rightarrow \begin{array}{r} \\ \hline \end{array}$$

11.

$$\begin{array}{r} 780 \\ \rightarrow \\ \hline \end{array}$$

$$\begin{array}{r} - 197 \\ \hline \end{array} \rightarrow \begin{array}{r} \\ \hline \end{array}$$

12.

$$\begin{array}{r} 617 \\ \rightarrow \\ \hline \end{array}$$

$$\begin{array}{r} - 191 \\ \hline \end{array} \rightarrow \begin{array}{r} \\ \hline \end{array}$$

A bald eagle in Louisiana built its nest in a tree 91 feet off the ground. A bald eagle in Arkansas built its nest in a tree 56 feet off the ground. About how much higher was the Louisiana eagle's nest than the one in Arkansas?



Eagles like to build their nests in a "super-canopy" tree, one that rises above all the others so that they can see all around. Their nests can be 5 feet across!



ESTIMATE AND MATCH

You Will Do:

This activity requires you to estimate numbers to the nearest hundred and then subtract them without writing the estimations down. You can do this! When you figure out the estimated difference, draw a line connecting the subtraction fact to the best estimation of the difference.

$$\begin{array}{r} 613 \\ -517 \\ \hline \end{array}$$

200

$$\begin{array}{r} 578 \\ -269 \\ \hline \end{array}$$

100

$$\begin{array}{r} 873 \\ -497 \\ \hline \end{array}$$

500

$$\begin{array}{r} 798 \\ -287 \\ \hline \end{array}$$

300

$$\begin{array}{r} 285 \\ -102 \\ \hline \end{array}$$

400

Subtracting Three-Digit Numbers in the Vertical Format

In this lesson we will review how to subtract in the vertical format. We line up the hundreds, tens, and ones so that we can subtract them. But remember, sometimes we have to regroup. In some problems we will even have to regroup more than once.

Example one: $387 - 134$ Estimate: $400 - 100 = 300$
Step One:
 Subtract the ones.

$$\begin{array}{r} 3 & 8 & 7 \\ - 1 & 3 & 4 \\ \hline & & 3 \end{array}$$

Step Two:
 Subtract the tens.

$$\begin{array}{r} 3 & 8 & 7 \\ - 1 & 3 & 4 \\ \hline & 5 & 3 \end{array}$$

Step Three:
 Subtract the hundreds.

$$\begin{array}{r} 3 & 8 & 7 \\ - 1 & 3 & 4 \\ \hline 2 & 5 & 3 \end{array}$$

Compare your real answer to your estimated answer to see if you can be confident that you got the right answer.

We estimated our answer would be about 300. Our real answer was 253. We know that if it is 5 or above, we give it a shave. 253 rounds to 300 so yes, we can be confident we have the right answer!

Example two: $517 - 293$ Estimate: $500 - 300 = 200$
Step One:
 Subtract the ones.

$$\begin{array}{r} 5 & 1 & 7 \\ - 2 & 9 & 3 \\ \hline & & 4 \end{array}$$

Step Two:
 Subtract the tens.

$$\begin{array}{r} 4 & || \\ \cancel{5} & \cancel{1} & 7 \\ - 2 & 9 & 3 \\ \hline & 2 & 4 \end{array}$$

Step Three:
 Subtract the hundreds.

$$\begin{array}{r} 4 & || \\ \cancel{5} & \cancel{1} & 7 \\ - 2 & 9 & 3 \\ \hline 2 & 2 & 4 \end{array}$$

1 ten is less than 9 tens.
We need to regroup 1 hundred as 10 tens.

Our answer of 224 is close to our estimated answer of 200.

Example three: $621 - 178$

Estimate: $600 - 200 = 400$

Step One:

Subtract the ones.

6	2	1
-	1	7
		3

1 is less than 8. We need to regroup a ten as ten ones. After regrouping we have only 1 ten.

Step Two:

Subtract the tens.

5		
6	2	1
-	1	7
	4	3

1 ten is less than 7 tens. We need to regroup a hundred as ten tens.

Step Three:

Subtract the hundreds.

5		
6	2	1
-	1	7
4	4	3

443 is close to 400, so we can be confident our answer is correct!

Estimating the answer first helps you find a mistake if you make one. You can also use a related addition problem to check your answers.

$$\begin{array}{r} 443 \\ + 178 \\ \hline 621 \end{array}$$

A related addition fact can help me check my work.





Practice

For each problem, first estimate the difference. Then, subtract to find the exact answer. Compare your numbers to see if they are close.

1. $\underline{\hspace{2cm}}$
Estimate

$$\begin{array}{r} 4 \ 9 \ 7 \\ - 2 \ 2 \ 3 \\ \hline \end{array}$$

2. $\underline{\hspace{2cm}}$
Estimate

$$\begin{array}{r} 5 \ 2 \ 3 \\ - 3 \ 0 \ 5 \\ \hline \end{array}$$

3. $\underline{\hspace{2cm}}$
Estimate

$$\begin{array}{r} 6 \ 1 \ 4 \\ - 3 \ 7 \ 1 \\ \hline \end{array}$$

4. $\underline{\hspace{2cm}}$
Estimate

$$\begin{array}{r} 4 \ 1 \ 3 \\ - 2 \ 2 \ 1 \\ \hline \end{array}$$

5. $\underline{\hspace{2cm}}$
Estimate

$$\begin{array}{r} 6 \ 2 \ 1 \\ - 2 \ 3 \ 8 \\ \hline \end{array}$$

6. $\underline{\hspace{2cm}}$
Estimate

$$\begin{array}{r} 7 \ 7 \ 3 \\ - 3 \ 8 \ 9 \\ \hline \end{array}$$

Fill in the blanks with the three-digit number that gives the correct difference.

$$\begin{array}{r} 7 \ 8 \ 8 \\ - \ \ \ \ \ \ \\ \hline 5 \ 6 \ 3 \end{array}$$



SUBTRACTING WITH BASE TEN BLOCKS

You Will Need:

- Base ten blocks

You Will Do:

1. Act out the subtraction problem below with your base ten blocks.

$400 - 187 =$

2. First, use four flats to model 400.
3. To take away 187 you will need to break one of the flats into ten rods. You will then need to break one of the rods into ten ones.
4. Write the answer in the space provided.



Subtracting Across Zeroes

When a number has zero tens like in the opening activity, you'll have to regroup before subtracting. Just remember that 100 is the same as 9 tens and 10 ones. Look at this example of the problem from the opening activity.



Step 1

Zero is less than seven so we need to regroup in our ones place value. There are zero tens so we need to regroup twice.

$$\begin{array}{r} 400 \\ - 187 \\ \hline \end{array}$$

Step 2

First, break 100 into 10 tens. Don't forget to mark your new number in your hundreds place value as well.

$$\begin{array}{r} 3\ 10 \\ \cancel{4}\cancel{0}0 \\ - 187 \\ \hline \end{array}$$

Step 3

Now regroup the 10 tens as 9 tens and 10 ones. And now you can subtract.

$$\begin{array}{r} 3\ 9\ 10 \\ \cancel{4}\cancel{0}0 \\ - 187 \\ \hline 213 \end{array}$$

Remember:

100 can be regrouped as 9 tens (90) and 10 ones.

$$100 = 90 + 10$$





Practice

Find the difference. Choose two problems to check with addition on a piece of scrap paper.

1.

$$\begin{array}{r} 300 \\ - 153 \\ \hline \end{array}$$

2.

$$\begin{array}{r} 541 \\ - 338 \\ \hline \end{array}$$

3.

$$\begin{array}{r} 414 \\ - 221 \\ \hline \end{array}$$

4.

$$\begin{array}{r} 800 \\ - 227 \\ \hline \end{array}$$

5.

$$\begin{array}{r} 900 \\ - 561 \\ \hline \end{array}$$

6.

$$\begin{array}{r} 500 \\ - 339 \\ \hline \end{array}$$

7.

$$\begin{array}{r} 600 \\ - 128 \\ \hline \end{array}$$

8.

$$\begin{array}{r} 914 \\ - 441 \\ \hline \end{array}$$

Jamie has a \$500 Monopoly bill. She wants to buy a property that costs \$175. How much money will she have left?



WIN THE NEST

**You Will Need:**

- 2 players
- A paper clip
- Colored pencils - Separate color for each player
- Lesson 14 Spinners Sheet (in the back of the answer key)
- Lesson 14 Recording Sheets (in the back of the answer key)

You Will Do:

1. Player one places a paper clip in the center of the first spinner and holds it in place with the tip of the pencil. Player one flicks the paper clip to spin it and writes down the number on the recording sheet in the top space provided for problem number 1.
2. Player one spins the second spinner and writes that number below the first spun number.
3. Player one subtracts the number on the second spinner from the first number and colors in an egg on the game board on the next page that is the same as the difference.
4. Player two spins twice and writes the numbers in the spots provided for problem 1 on his or her recording sheet. He or she subtracts the numbers and colors in an egg on the gameboard that is the same as the difference.
5. The players continue to take turns. If a player spins a problem they have already done, they spin again. If all the eggs with the correct answer are already colored in, then the turn is skipped.
6. The first player to color in all the eggs in any nest wins. If no nest can be won, the player with the most eggs wins.

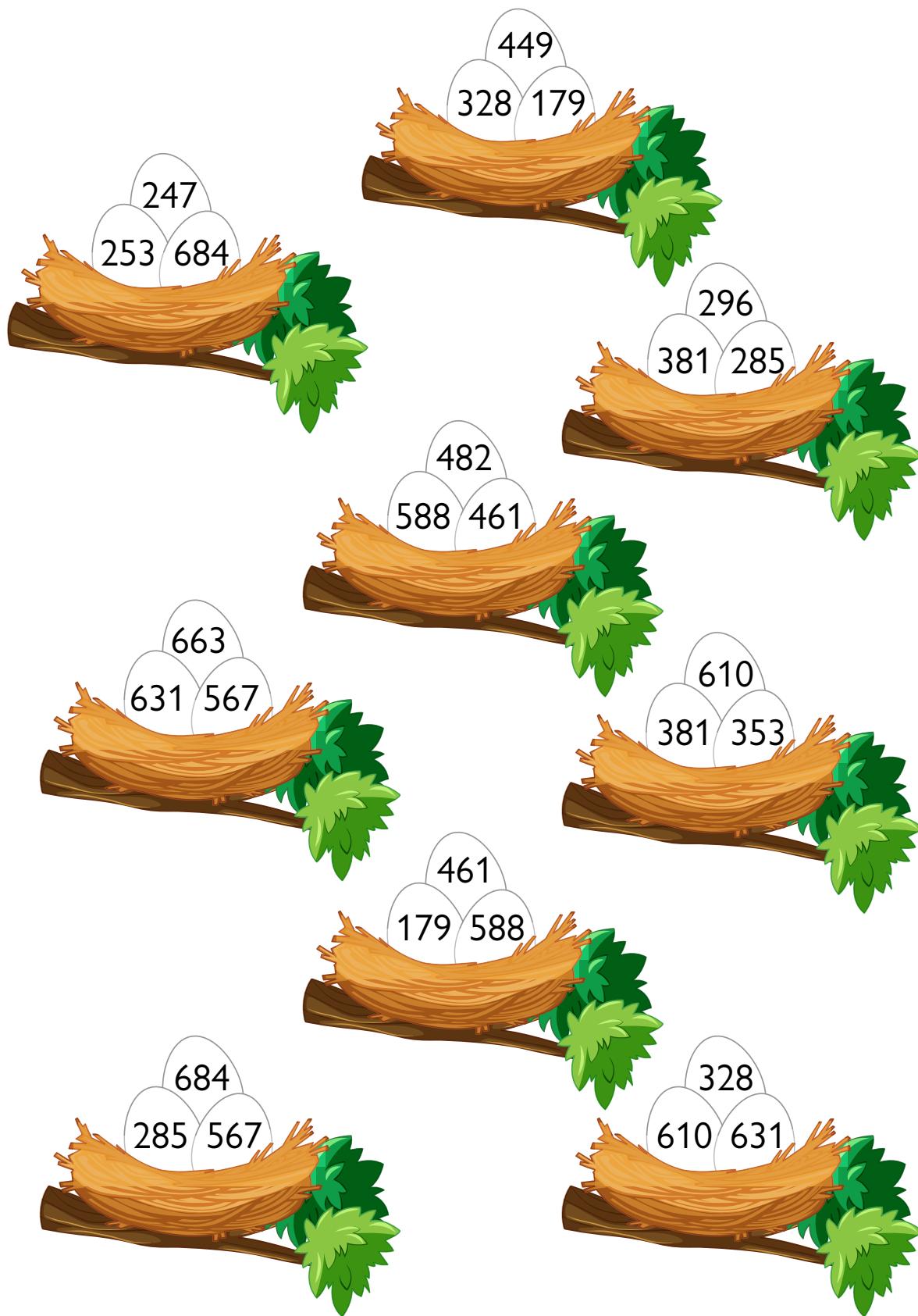


Lesson 14 Recording Sheet

Player One's Name _____	Player One's Name _____
1. <input type="text"/> <input type="text"/>	2. <input type="text"/> <input type="text"/>
3. <input type="text"/> <input type="text"/>	4. <input type="text"/> <input type="text"/>

Lesson 14: Spinners

Win the Nest Game Board



Addition and subtraction Word problems

In this lesson you will use your addition and subtraction skills from this chapter to solve word problems. The hardest part of solving this kind of word problem is deciding if you need to add or subtract. Take a moment to review these common addition and subtraction terms.

Words for Addition			
add		total	
altogether		plus	
sum		in all	

Words for Subtraction			
	minus		fewer
difference			more than/ less than
take away			how many are left?

Drawing a bar model can also help you choose the correct operation. In a bar model the small bars show the parts and the long bar shows the whole.



If you add the two parts together you get the whole. Here is an example.

Sam has \$323 dollars and Aaron has \$219 dollars. How much money do they have in all?

\$323 \$219

?

You can see the key words “in all” which mean you need to add. Don’t forget that you should use your estimation skills to quickly check if your answer makes sense.

$$\begin{array}{r} 323 \\ + 219 \\ \hline 542 \end{array}$$

\$542 dollars in all.

If you subtract a part from the whole you can find the missing part. Here is an example.

Together Sam and Aaron have \$542 dollars. Aaron has saved \$219. How much money has Sam saved?

?	\$219
\$542	

$$\begin{array}{r} 3\cancel{4}2 \\ - 219 \\ \hline 323 \end{array}$$

Sam has \$323.



Practice

Label the bar models for each problem. Then solve the problem.

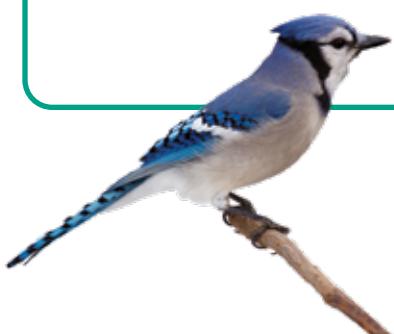
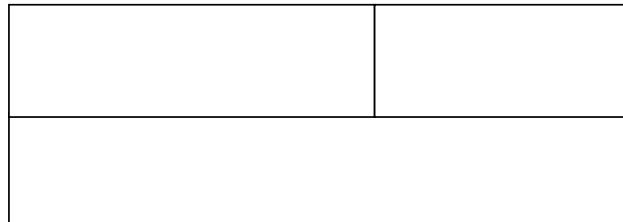
Mikaylin started out with 500 boxes of cookies. She sold 227 boxes. How many boxes does she have left?



Amanda has 278 crayons and Mike has 119. How many crayons do they have altogether?



422 robins and 191 blue jays were spotted yesterday. How many more robins were spotted than blue jays?



On Saturday 516 people attended the carnival. On Sunday 322 people attended. How many total people attended the carnival this past weekend?

A bat ate 323 mosquitoes and 419 gnats in an hour. How many total insects did the bat eat?



Some bats can eat up to 1200 insects in one hour!

327 bats live at a zoo. 239 of them eat insects and the rest eat fruit. How many of the bats at the zoo are fruit eaters?



Fruit eating bats are larger than insect eaters and live in warm climates. The biggest ones can have a wing span of six feet.



ACT IT OUT

You Will Need:

- 30 Pennies (or another type of counter)

You Will Do:

Use the pennies to act out this problem. Talk with your parent about how you solved it.

Amelia has 10 pennies. Cassidy has twice as many pennies as Amelia. How many pennies do they have altogether?



Two-Step Word Problems

In the last lesson you solved word problems by first deciding if you needed to add or subtract. In this lesson you will solve word problems where you need to do more than one thing to find the answer. Look at this example.

Brianna has \$112 in her bank account. Alexa has twice as much money as Brianna. How much money do they have altogether?

The word “altogether” is a clue that you need to add to find the total. But first we need to figure out how much money Alexa has. We are told that she has twice as much as Brianna.

$$112 + 112 = 224$$

Now we can find the total they have altogether.

$$224 + 112 = 336$$

They have \$336 altogether.



Example:

We sold 470 tickets to the show on Friday. We sold 50 fewer tickets on Saturday than on Friday. How many tickets did we sell total?



First, we need to find out how many tickets were sold on Saturday.

$$470 - 50 = 420$$

Now we can find the total.

$$470 + 420 = 890$$



Practice

Solve each of the problems below. You may want to draw a bar model.

1. There are 89 pages in the book I am reading. I read 22 pages yesterday and 37 pages today. How many pages do I have left to read?
2. 720 people went to the football game. 400 of them were adults and the rest were children. How many more adults went to the football game than children?
3. Sarah has \$330. Her sister Maggie has \$40 less than her. How much money do they have altogether?



Practice

4. 460 kids went to camp. 140 of them were girls. How many more boys went to camp than girls?

5. Asa collected 240 box tops. Addie collected twice as many as him. How many box tops did they collect in all?

Challenge!

Joseph has 28 cards. Micah has 10 more cards than Joseph. Isaiah has 12 more cards than Joseph. How many cards does Isaiah have? How many cards do the boys have total?

Mixed Review



Skills Check

You should have been practicing subtracting two-digit numbers each day as part of your skills practice. Here are a few more for you to try.

$$\begin{array}{r} 77 \\ - 34 \\ \hline \end{array} \quad \begin{array}{r} 61 \\ - 19 \\ \hline \end{array} \quad \begin{array}{r} 40 \\ - 22 \\ \hline \end{array}$$

Write the numbers in expanded form to find the sum.

472	<hr/> + <hr/> + <hr/>
<hr/> + 511	<hr/> + <hr/> + <hr/> <hr/> <hr/> + <hr/> + <hr/> = <hr/>

Find the sum.

$$\begin{array}{r} 309 \\ + 221 \\ \hline \end{array}$$

$$\begin{array}{r} 214 \\ + 517 \\ \hline \end{array}$$

Find the difference.

$$\begin{array}{r} 347 \\ - 134 \\ \hline \end{array} \quad \begin{array}{r} 516 \\ - 295 \\ \hline \end{array}$$

$$\begin{array}{r} 522 \\ + 298 \\ \hline \end{array}$$

$$\begin{array}{r} 188 \\ + 353 \\ \hline \end{array}$$

$$\begin{array}{r} 700 \\ - 119 \\ \hline \end{array} \quad \begin{array}{r} 601 \\ - 234 \\ \hline \end{array}$$



SETTING UP YOUR LEMONADE STAND

You Will Need:

- Colored pencils or markers
- Scratch paper
- Unit 1 Project Activity Sheets (in the back of the answer key)



Part One: Design Your Lemonade Stand

Carefully tear out the activity sheet from the back of the answer key. Write the name of your stand and then color it in.



Part Two: Ordering Supplies

You are going to setup and run a lemonade stand at a summer festival. The festival draws a lot of people and the weather forecast looks hot, so be prepared for a crowd!

You have a total budget of \$300 to set up your stand. You want to spend about \$100 on ingredients and about \$200 on paper products.

Answer these questions.

1. Carefully tear out the Lemons and Sugar Shopping Activity Sheet from the back of the answer key. You want to spend about \$100 total. Use rounding and estimation to decide which option will work best for you.
2. Once you have circled your choice, add to find the exact cost.

The exact cost of the ingredients I chose will be: _____

3. How much of the \$300 you started with do you have left now?

I have \$ _____ leftover.

4. Carefully tear out the Paper Products Shopping Activity Sheet from the back of the answer key. You want to spend about \$200 total. Use rounding and estimation to decide which option will work best for you.

5. Once you have circled your choice, add to find the exact cost.

The exact cost of the paper products I chose will be: _____

6. How much money do you have left now?

I have \$ _____ leftover.

Part Three: Preparing for Sales

A friend ran the lemonade stand at the festival last year and recorded the sales each day. Use their table of information to answer the questions below.

1. How many cups of lemonade were sold on Friday and Saturday?

2. How many more cups of lemonade were sold on Thursday than on Saturday?

3. Which two days had the highest amount of sales? How many total cups of lemonade sold on those two days?

4. What was the difference in sales between the highest selling day and the lowest selling day?

Lemonade Sales	
Monday	153
Tuesday	78
Wednesday	221
Thursday	352
Friday	114
Saturday	267

You've purchased your supplies and you've done some research on lemonade sales. You'll finish the second part of this project at the end of unit two when you start selling.