

# Survive Math Five

*Addition and Subtraction*



Part 1  
*Addition*



# Survive Math 5

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## Part 1

### Addition

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# Survive Math 5

## Part 1

### Addition

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# Survive Math Five

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## Introduction

The intent of this program is to assist you, the parent, in working with your child to develop a strong mathematical base of knowledge and to develop mathematic literacy.

Many children arrive in Grade Five lacking, or are weak in, basic mathematic concepts and operations. Children need the freedom to explore and to develop reasoning and mathematic skills, and to be able to show and explain these skills to others. Also, children should understand that mathematics is not just simple rules; it should make sense, be logical, and enjoyable.

To be successful in mathematics children must understand the “how” and “why” of each operation. A child’s ability to reason is as valuable as her or his ability to find the correct answers.

It is important for children to use “manipulatives” (concrete objects) to explore, develop, and apply mathematical concepts. Before children are allowed to use a calculator as a tool they should learn and understand the basic facts.

The activities in this program are designed to engage your child’s interest, develop a number sense, and learn the basic operations and concepts for:

- addition and subtraction
- multiplication and division
- common and decimal fractions
- problem solving

At the completion of this program your child should be able to use the number operations appropriately and effectively.

In each package you will find:

- Learning outcomes for the topics covered
- Twenty-minute lessons and ideas for review
- Pre-Tests
- Mastery Test
- Practice Sheets
- Games
- Answer Key
- Glossary

In each package there is also a selection of **Teaching Aids** that are to be used with selected lessons.

### **Practice Sheets**

Each practice sheet contains the following sections:

- Warm-Up
- It's Your Turn
- Challenge Yourself

All of the activities in each section are short and, we hope, enjoyable.

Before your child begins either the Addition or Subtraction parts of this package, you will administer a Pre-Test that will determine the lesson where you will begin working with your child.

All Mathematics computation should be completed in pencil.

It is important that your child understands the concept or skill covered in each lesson before you move to the next one. If your child has difficulty with any concept or skill, you will need to give her or him additional concrete “hands-on” experiences and practice. Use the information in the package as a guide if you need to develop further practice materials.

When your child has a good understanding of the concept or skill taught in any given lesson, proceed to the next lesson.

There is little value in asking your child to do additional work on something she or he already knows.

**Additional materials needed for many lessons:**

- Ruler to use as a number line
- Blank paper or chalkboard
- Playing cards
- Calculator
- Access to a computer

Mathematics concepts are easier to understand if your child progresses from the **concrete**, to the **pictorial**, to **numerals**.

**It is important to provide your child with a selection of concrete materials.**

For example, you could use buttons, straws, pasta pieces.

There is an old Chinese proverb that says:

*I hear and I forget*  
*I see and I remember*  
*I do and I understand*

## Math Web Sites

If any of the following Web sites are not working, use a search engine such as Google to find other appropriate sites.

### Resources and Ideas for Parents

[http://www.busyteacherscafe.com/units/add\\_sub\\_unit.htm](http://www.busyteacherscafe.com/units/add_sub_unit.htm)

<http://www.eduplace.com/math/brain/>

<http://math.rice.edu/~lanius/Lessons>

<http://www.figurethis.org/>

<http://www.aaamath.com>

<http://www.dositey.com/addsub/addsub34.htm>

<http://www.aaamath.com/add34a-inverseadd.html>

### Math Games

<http://www.funbrain.com>

<http://www.funbrain.com/numbers.html>

<http://www.aplusmath.com/cgi-bin/games/addmatho>

<http://www.aplusmath.com/cgi-bin/games/subpicture>

<http://www.mathsonline.co.uk/nonmembers/gamesroom/bugs/bugrace3.html>

<http://www.dositey.com/addsub/memoryadd.html>

<http://www.funbrain.com/math/index.html>

<http://www.aaamath.com/g31d-placevalue-add.html>

<http://www.aaamath.com/plc31e-placevalue-w2n.html#section2>

<http://www.funbrain.com/osa/index.html>

<http://www.scweb4free.com/addition-games.htm>

<http://www.scweb4free.com/subtraction-games.htm>

<http://www.funbrain.com/cgi-bin/nl.cgi?A1=s&2=1>

<http://www.funbrain.com/cgi-bin/fract.cgi?A1=s&A2=3&A15=0>

<http://www.dositey.com/addsub/mystery2AS.htm>

<http://www.dositey.com/addsub/add3dig.htm>

<http://www.dositey.com/worksheet/was32p.html>

<http://www.playkidsgames.com/games/apples/default.htm#>

<http://www.playkidsgames.com/games/robot/default.htm#>  
<http://www.playkidsgames.com/games/shuttleLaunch/default.htm#>

### Worksheet Web sites

<http://www.aplusmath.com/Worksheets/Addition.html>  
<http://www.bbc.co.uk/skillswise/numbers/wholenumbers/addsubtract/mental/worksheet.shtml>  
<http://www.dositey.com/worksheet/ww2.htm?n1=10000&n2=10000&oper=pl&nimin=1000&n2min=1000&pos=v&picurl=animals/seahorseL.gif>  
<http://www2.whidbey.net/ohmsmath/webwork/javascript/subwork.html>  
<http://www.sssoftware.com/freeworksheets/subtraction.html>  
[http://www.onlineworksheets.org/math\\_worksheets.htm#four](http://www.onlineworksheets.org/math_worksheets.htm#four)  
<http://www.tlsbooks.com/mathworksheets.htm>  
<http://www.aplusmath.com/Worksheets/OnlineSubtraction.html>  
<http://math.about.com/od/addingsubtracting/a/subtractws.htm>  
<http://www.happychild.org.uk/wks/math/key1/subtract/index.htm>  
<http://www.blackdog.net/games/math/worksheets/sub/>  
<http://www.kidzone.ws/math/dynamic.htm>  
<http://www.dositey.com/addsub/subtraction.htm>

### Flashcards

<http://www.aplusmath.com/Flashcards/subtraction.html>  
<http://www.aaamath.com/sub.html>

## Regrouping Questions and Answers

[http://mathforum.org/library/drmath/sets/select/dm\\_borrow.html](http://mathforum.org/library/drmath/sets/select/dm_borrow.html)

Chisenbop – doing basic arithmetic using your fingers

<http://klingon.cs.iupui.edu/~aharris/chis/chis.html>

## Speed Drills

<http://sjvcatholic.tripod.com/speed.html>

<http://education.jlab.org/smadd/index.html>

# Welcome to Addition and Subtraction—Part 1

## Lesson 1 Place Value to 1000

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Before you begin the addition and subtraction activities in this package, take time to make sure your child understands the underlying concepts of our number system.



### What You Need

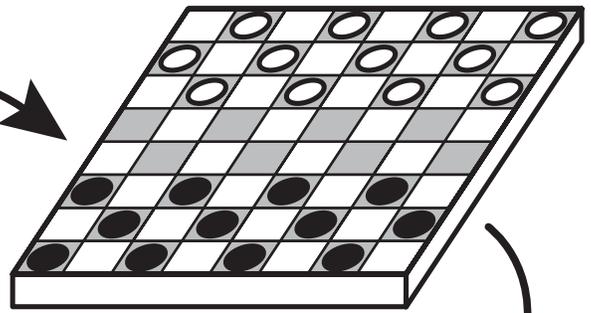
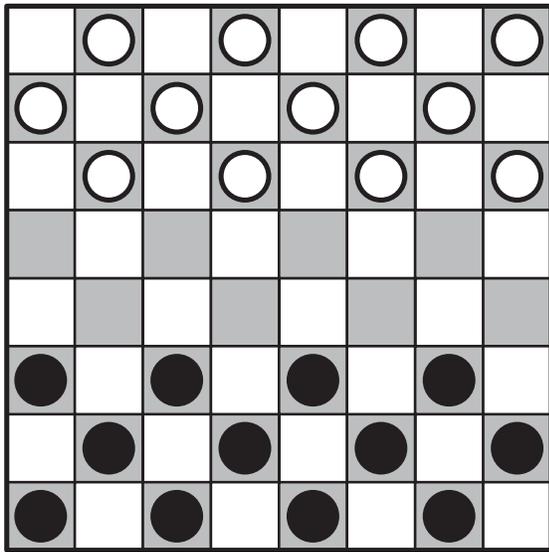
- Practice Sheets
- Teaching Aids
  - Place value mat
  - Base 10 blocks

Explain to your child that our numeral system is based on the Hindu-Arabic numerals, as they were developed and widely used by these cultures. Our number system is based on repeated groups of 10, called base 10. In the past, base 10 numbers were represented on a counting board or by the use of beads on an abacus.

Later, base 10 numbers were represented on paper using numerals (written numbers). The numeral zero (0) was invented to stand for a place found on the counting board or abacus that held nothing (no object or bead). We call zero a **place holder**.

For example, we read 408 as 8 ones, 0 (no) tens, 4 hundreds

## What is this?



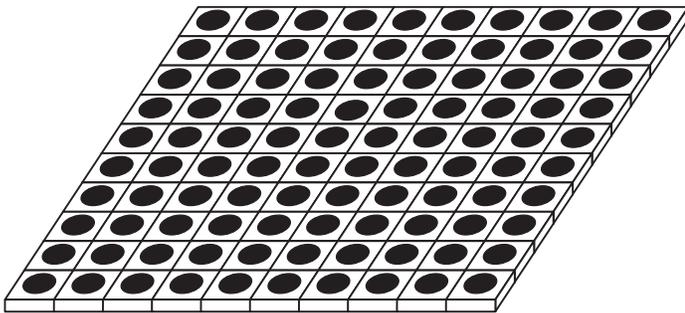
If you have ever played the game of checkers, you will recognize this is a checkerboard. Let's cut out one square, like this, and give it a value or BASE of ONE.



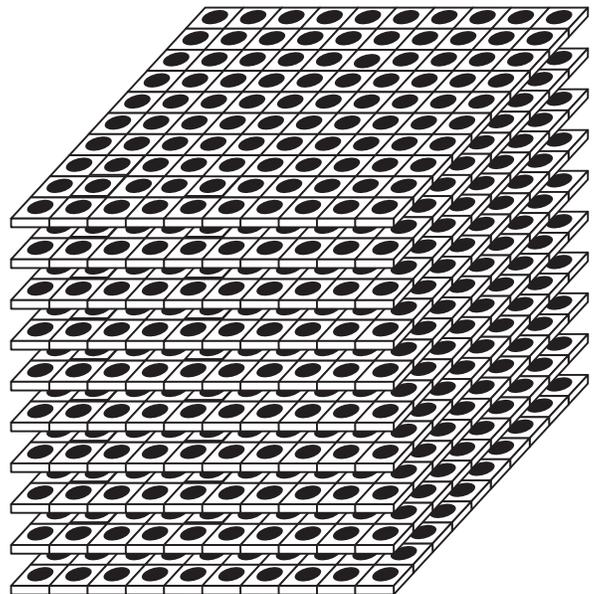
From a base of one, cut out nine more squares and we will have a BASE of TEN!



Imagine laying ten of these strips together, side by side, like this.



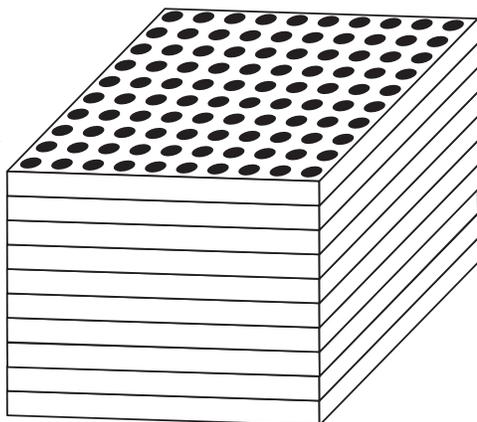
Now you have a base of — count them — a BASE of ONE HUNDRED!



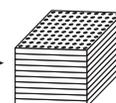
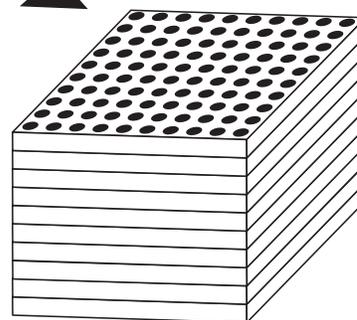
What would result if we glued all those strips together and made a sheet with a base of 100 — and stacked ten of those sheets one on top of the other, as shown? We would now have a base of  $(100 + 100 + 100 + 100 + 100 + 100 + 100 + 100 + 100)$  or  $(10 \times 100)$  which would be a BASE of ONE THOUSAND!

To save space, let's put our ten sheets into a more compact size.

It still represents a BASE of 1000 — it is just reduced in size.



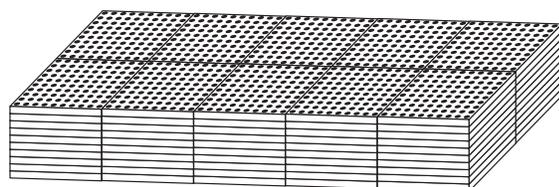
We can shrink it more and again, so it becomes a smaller version of a BASE of 1000.



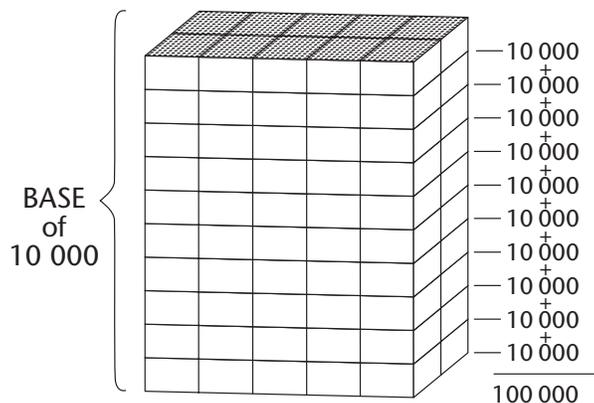
Now, in a much smaller space, we can work with some very large numbers!  
For instance, look at the following operation.

$$10 \text{ blocks} = 10\,000$$

Organized in a different way, a BASE of 10 000 could also look like this.



In the following diagram, we have taken the base 10 000 and stacked these units into a tower which has 10 floors — or, 10 layers of base 10 000. Now, what BASE can you calculate? (note the addition at the far right)



## Review

From a BASE of ONE,



we made a unit with a BASE of TEN,



then put ten of those strips together to make a sheet of dots

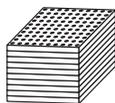
which added up to 100, so we say we have a BASE of ONE HUNDRED!

Now, when we stack 10 of those sheets

on top of each other,

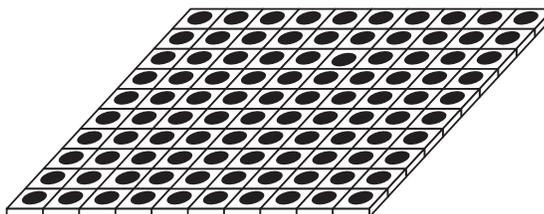
we have  $10 \times 100 =$

BASE of 1000.



Then those units with a

BASE of 1000 can be stacked into even larger units.



### Warm-Up

Before introducing the lesson topic, ask your child to take out the Lesson 1 Practice Sheet and complete the Warm-up activity. Read the directions with your child to ensure she or he understands what is required to complete the activity.

When your child has completed the activity, correct it with your child. You will find the answers in the Answer Key at the back of this book.

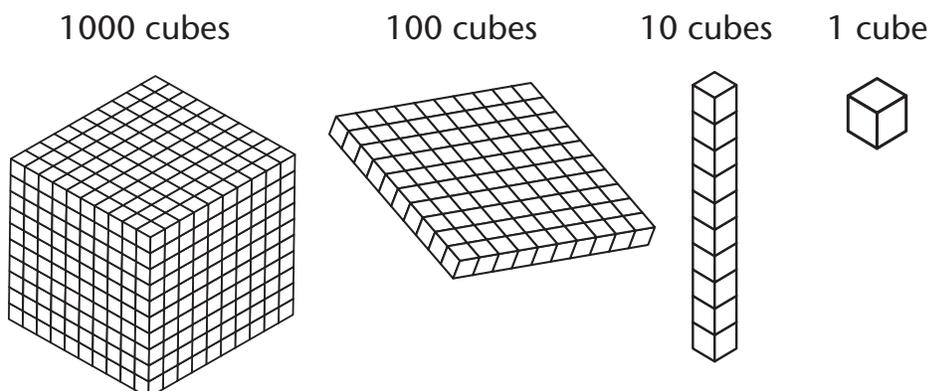


### Exploring the Topic

#### Parent Script:

Whole numbers are made up of the digits 0 to 9. Each digit represents a given number of objects. The number 55 (fifty-five) has two digits, 5 and 5. The number 1555 (one thousand five hundred fifty-five) has four digits. The value of each digit is different because of its place in the number. This is called **place value**.

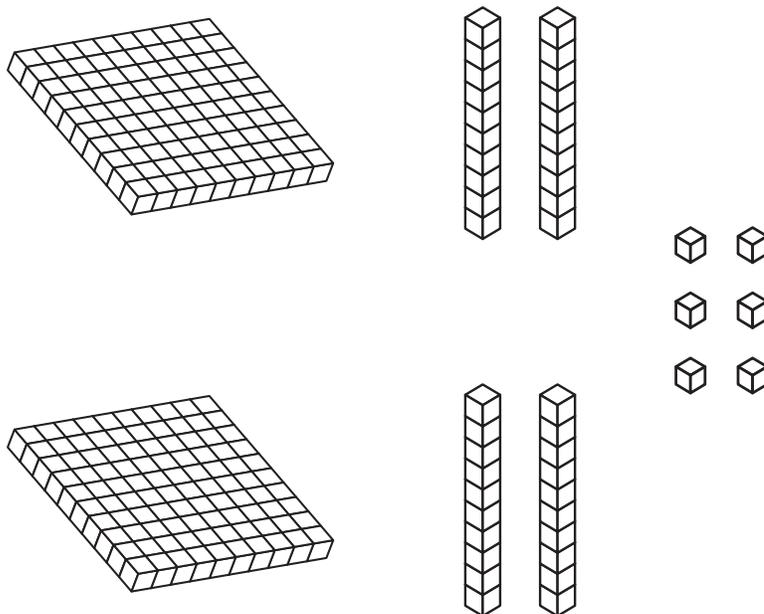
## Base Ten Blocks

**Parent Script:**

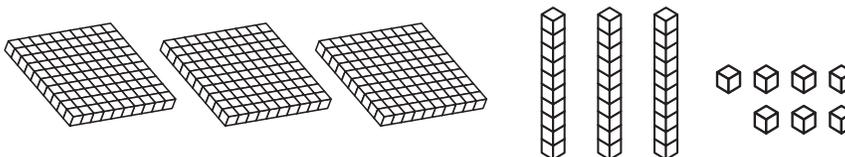
This chart shows how you use base 10 blocks to represent and show you understand the place value of numbers to one thousand.

Can you read the numbers shown by the following base 10 blocks? Use the chart above if you need to.

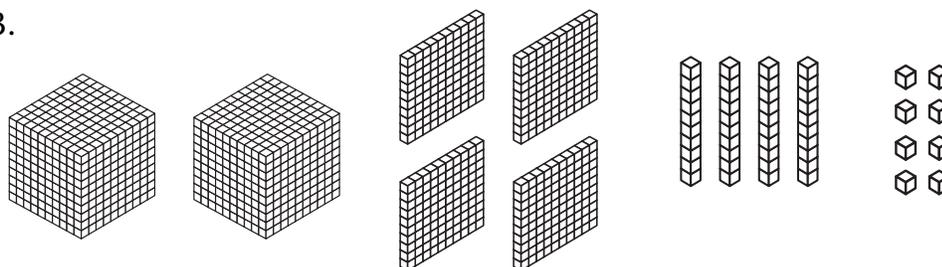
1.



2.



3.



Put out the place value materials you have prepared. Ask your child to use the base 10 blocks and place value mat to show you the following numbers.

**71      878      108**

**90      1126      7054**

**456      5400**

### It's Your Turn



Have your child look at this section on the Lesson 1 Practice Sheet. To make sure your child understands the activity directions help your child to complete the first question. Now ask your child to complete the rest of the section independently.

When your child has completed this section, mark his or her work. The Answer Key is at the back of this book. Help your child to do any needed corrections.

If your child has difficulty understanding place value, you need to provide extra practice. Do this before you proceed to the next lesson. Write four or five numbers (to 9 999) and help your child represent each number on the place value mat.

Ask your child to explain his or her reasons for placing the blocks in each section of the mat. When she or he can explain correctly, move on.



### Challenge Yourself

Ask your child to finish this lesson by completing the **Challenge Yourself** activity on the Lesson 1 Practice Sheet. You will find the answers in the Answer Key.

## Lesson 2

### Place Value to 10 000



#### What You Need

- Practice Sheets
- Teaching Aids
  - Place value mat
  - Base 10 blocks
- Blank paper or chalkboard

Each lesson usually begins with an activity that reviews skills and/or concepts taught in previous lessons.



#### Warm-Up

To begin today's lesson, take out the Lesson 2 Practice Sheet and ask your child to complete the Warm-Up activity. When he or she is finished, mark the work with your child. The Answer Key is at the back of this book.



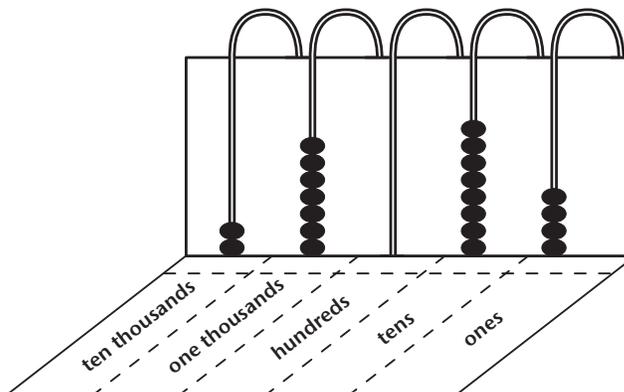
#### Exploring the Topic

Begin the lesson by asking:

Why do you think our number system uses a base of 10?  
Why not five or twenty?

If your child has difficulty making a guess, prompt your child to the answer, "We have ten fingers." Our fingers were probably man's first counting tools.

Show your child the abacus.



Explain how the abacus works. Beads represent the base 10 numbers. Each bead represents a certain number of items.

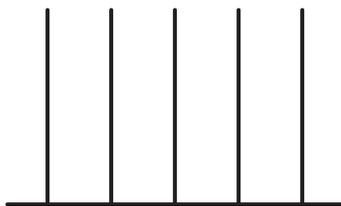
Point out there are seven beads on the thousands pole in the illustration. They represent seven thousand items.

Now ask your child to tell you:

- The number of ones the beads represent.
- The number of tens represented on the tens pole. (Eight beads stands for eight tens or eighty).

A pictorial abacus is used to represent numbers up to hundred thousands because working with a place value mat and blocks above one thousand is difficult.

On a sheet of paper or on a chalkboard draw two blank abacuses. See the example below.



On an abacus have your child draw the correct number of beads to match the following numbers.

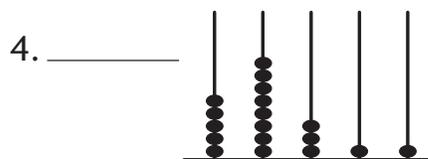
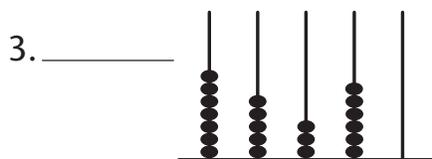
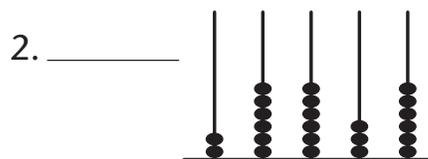
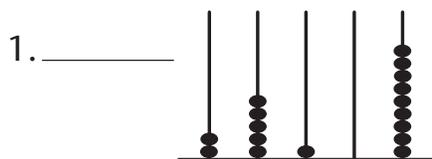
**19 212**

**36 245**

Check your child's work. Ask your child to read each number to you.

If your child has difficulty drawing the beads on the abacus, label each pole. Give your child as many examples to ten thousands as she or he needs. Make sure you include numbers that have zero in each position (1s, 10s, 100s, 1000s, 10 000s.)

Ask your child to look at each of the following examples and write the numerals for the beads beside each abacus.



When your child has completed this activity, ask your child to complete the **It's Your Turn** section for Lesson 2.

Mark and correct the activity with your child and then ask your child to complete the **Challenge Yourself** activity. The correct answers for both sections can be found in the Answer Key.

## Lesson 3

### Place Value to 100 000s

Your child learned in an earlier lesson that when you work with higher numbers it is difficult to show every item represented. As he or she develops an understanding of place value, it also becomes unnecessary. In this lesson continue to use abacus drawings as they are an excellent model for representing higher numbers.



#### What You Need

- Practice Sheets
- Teaching Aids
  - Four blank abacuses with a hundred thousands pole



#### Warm-Up

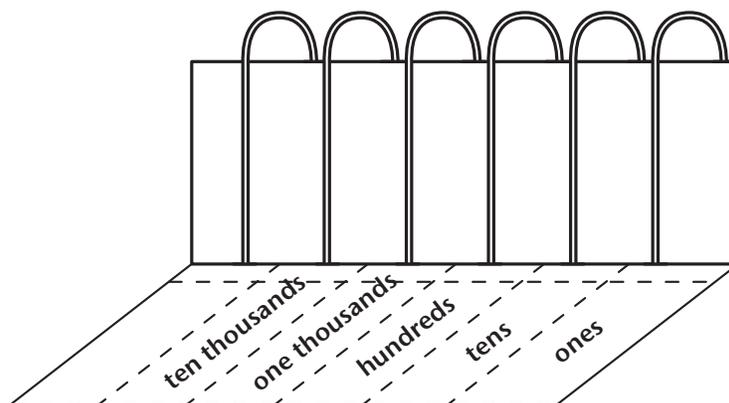
Today's Warm-up reviews place value to ten thousands. Ask your child to take out the Lesson 3 Practice Sheet. Make sure he or she understands the directions before answering the questions independently. The answers are in the Answer Key.



#### Exploring the Topic

##### Parent Script:

Let's look at this abacus. A new pole has been added.



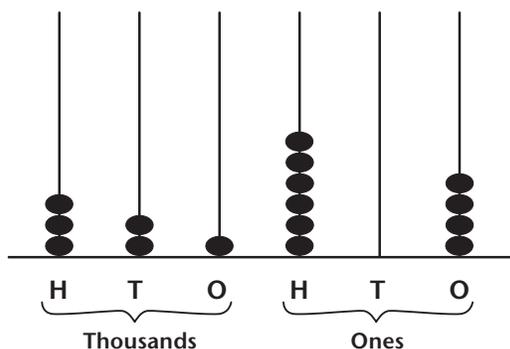
What number do you think beads on this pole would represent? (hundred thousands) Good for you!

Print the words "hundred thousands" in the blank space.

If your child has difficulty answering your question, have your child read the names of the other poles in order to recognize the pattern (ones, tens, hundreds followed by (one) thousands, ten thousands, hundred thousands).

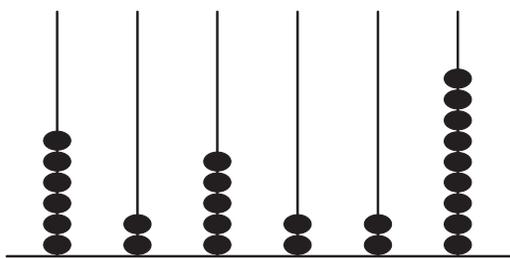
**Parent Script:**

Look at this abacus.



Can you figure out the number the beads represent? (321 604) Well done. What do the three beads on the left pole represent? (300 000)

Now tell me what number the beads on the following abacus represent. (625 229)



How many hundred thousands are in this number? (6)

Take out the abacuses you prepared in advance. On the first abacus, ask your child to draw the beads that represent 700 000.

Check his or her work.

Now have your child draw beads on the remaining abacuses to represent each of the following numbers:

**580 401**

**108 675**

**336 991**

Check your child's work. If he or she has represented the numbers correctly, move on. If not, have your child take another look at the pattern on the first abacus. Then give your child more examples to solve, similar to those above.

### Parent Script:

When we write numbers in the ten or hundred thousands, we leave a small space between the thousands and the units (ones). A small space between each group of digits makes them easier to read. Counting from the right, there is a space every three places. Large numbers are read in groups of three.

Read aloud each of these large numbers.

256 510    601 426    498 227

Now tell me the place value of each underlined digit. (six thousand, zero, four hundred thousand)



### It's Your Turn

When your child has completed this activity, ask your child to complete the **It's Your Turn** section on the Lesson 3 Practice Sheet.



### Challenge Yourself

Mark and correct the questions with your child and then ask your child to complete the **Challenge Yourself** activity. The correct answers for both sections are in the Answer Key.

## Lesson 4

# Counting Backward

Knowing how to count backward can help your child subtract and divide numbers more easily.



### What You Need

- Practice Sheets
- Teaching Aids
- Calculator



### Warm-Up

Before introducing the lesson topic, ask your child to take out the Lesson 4 Practice Sheet and complete the Warm-up activity. Read the directions with your child to ensure he or she understands what is required to complete the activity. If your child has difficulty, have your child use the abacus in Lesson 2 as an aid.

When your child has completed the activity, correct it together. You will find the answers in the Answer Key at the back of this book.



### Exploring the Topic

#### Parent Script:

When you can count 59, 60, 61 or 7999, 8000, 8001, you show that you understand the number system. The pattern is the same even when you move to higher numbers.

Counting backwards is harder as you have to think more carefully about what the next number will be, especially when you are counting in ten or hundred thousands.

Give it a try. We'll start with easier numbers.

- Count backward by ones from one hundred to fifty.  
Good!
- Count backward from one hundred by tens.
- Try counting back from one hundred by fives.

- Now skip count back from one hundred by twos. Stop when you get to fifty. Way to go!
- You can look at the hundreds chart to count backward from some larger numbers. You just change the hundreds. Count backward by twos from four hundred seventy-six to four hundred fifty.
- Now count backwards by fives from eight hundred fifty-five to eight hundred twenty-five. Good job!

If your child has difficulty, ask your child to count backwards using the hundreds chart below. Then provide your child with both more oral and written practice. See the example for written practice below. Don't move on in this lesson until your child feels comfortable counting back at this level.

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

Example for written practice:

Ask your child to count backward by fives and write down the numbers.

**80 85**      \_\_\_\_\_

Give your child two or three sets of numbers like the set above to work on. The numbers can go as high as nine hundred.

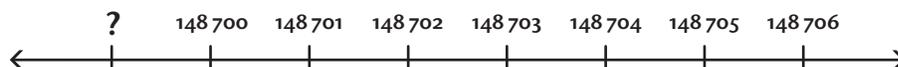
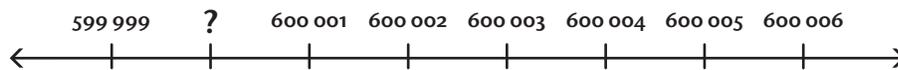
Use the same format to have your child count and write numbers counting back by tens, twos, and ones.

Take out a sheet of blank paper. Jot down the following numbers and ask your child to count each of them backward by one number and then write each new number down.

**6000, 7500, 1200, 24 650**

*(Answers: 5999, 7499, 11 999, 24 649)*

Number lines can help your child picture the counting of higher numbers both up and down. Have your child look at the following number lines and write down the numbers that replace the question marks.



The missing numbers are 600 000 and 148 699.

Finish off this part of the lesson by asking your child to count back to find the answers to the following questions.

Write down the number that:

- is five less than 7640
- is ten less than 12 900 (If your child needs a clue, tell your child to look at the 900.)
- is two less than 8897
- comes before 259 876 (one less)



### It's Your Turn

Have your child look at this section on the Lesson 4 Practice Sheet. To make sure your child understands the activity directions, help your child to complete the first question. Now ask your child to complete the rest of the section independently.

When your child has completed this section, mark his or her work. The Answer Key is at the back of this book. Help your child to do any needed corrections.



### Challenge Yourself

Ask your child to finish the lesson by completing this activity. You will find the answers in the Answer Key.

## Lesson 5

# Comparing and Ordering Numbers

Comparing and ordering numbers are skills that are often needed in everyday life.



### What You Need

- Practice Sheets
  - Teaching Aids
- Calculator



### Warm-Up

Before introducing the lesson topic, ask your child to take out the Lesson 5 Practice Sheet, and complete the Warm-up activity. Read the directions with your child to ensure he or she understands what is required to complete the activity.

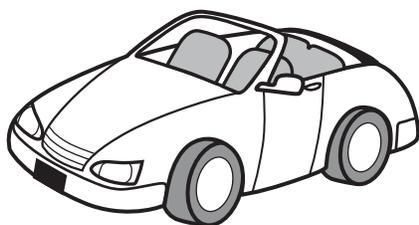
When your child has completed the activity, correct it with your child. You will find the answers in the Answer Key at the back of this book.



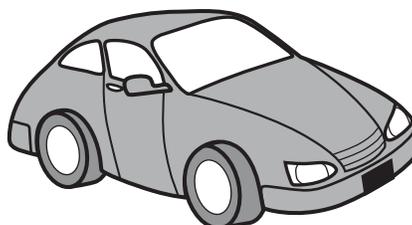
### Exploring the Topic

#### Comparing Numbers

Have your child look at the two cars. Ask which car has the greater mass.



Mass = 2096 kg



Mass = 2108 kg

**Parent Script:**

When you compare numbers to see which is greater, you compare the digits with the most value.

Look at the weights of the two cars. Which digit in both weights has the most value? (2) Good.

You can use these steps when you compare any two numbers. We'll compare the weights of the two cars.

1. Begin with the thousands digits.

2096          2108

2. The thousands digits are both 2 so you move to the hundreds digits and compare them.

2096          2108

3. The hundreds digit in the second number is greater, so 2108 is the greater number.

Do you remember the signs that are used to show 'greater than' or 'less than'?

If your child can't remember, show your child these two signs.

**>** means **greater than**

**<** means **less than**

Comparisons can also be made using the words.

Ask your child to read each written comparison and then add the correct sign to each of the two sets of numbers below.

**2096 is less than 2108**

**2096    2108**

**2108 is greater than 2096**

**2108    2096**

Now have your child place the correct sign ( $>$  or  $<$ ) in the space between each pair of the numbers that follow. Your child should follow the steps above. Have your child tell you what he or she is doing.

**909      910**

**521      519**

**7400      7229**

**4108      4801**

If your child has difficulty, walk through the steps again, using examples such as those above. Be sure he or she understands greater than/less than before you move on.

### Ordering Numbers

Explain to your child that ordering numbers simply means arranging numbers in order. He or she can order numbers from least to greatest or greatest to least.

#### Parent Script:

When you order numbers from least to greatest, you must first see how many digits each number has. Look at this example.

$$1001 > 999$$

Count the digits in each number.

You can see that because there are no thousands in the second number, it is less than 1001. This was easy because you just had to compare the thousands digits to solve the question.

Look at this example.

$$2152 > 2143$$

Both numbers have the same number of digits. Look at the thousands and then the hundreds. They are equal, so look at the tens. 2152 is greater because it has more tens. This was more difficult because it was necessary to compare the thousands, the hundreds, and the tens digits before you could solve the question of which number is greater.

Ask your child to order the following sets of numbers from **least** to **greatest**. Remind your child to count the digits in each number and then compare the thousands, hundreds, and so on.

4114	_____	16 088	_____
4100	_____	18 608	_____
4044	_____	16 008	_____
4401	_____	18 006	_____
		18 600	_____

Now have your child order this set of numbers from **greatest** to **least**.

5100	_____
5001	_____
5111	_____
5101	_____

Help your child if needed. You may need to give your child additional practice under your supervision.

Check your child's work. Your child is ready to work independently if he or she can order the numbers correctly.

*(Answers: 4044, 4100, 4114, 4401  
16 008, 16 088, 18 006, 18 600, 18608  
5111, 5101, 5100, 5001)*



### It's Your Turn

Draw your child's attention to this section on the Lesson 5 Practice Sheet. To make sure your child understands the activity directions, help your child to complete the first question. Now ask your child to complete the rest of the section independently.

When your child has completed this section, mark his or her work. Help your child to do any needed corrections.



### Challenge Yourself

Ask your child to finish the lesson by completing this activity. You will find the answers in the Answer Key.

*Racko Card Game* is an enjoyable way for your child to reinforce his or her skill in ordering numbers. It's a game for ages eight to adult and requires two to four players.

## Lesson 6

# Number Words—Expanded Notation



### What You Need

- Practice Sheets
- Teaching Aids
  - Base 10 blocks
  - Place value mat
- Blank paper or chalkboard



### Warm-Up

To begin today's lesson, take out the Lesson 6 Practice Sheet and ask your child to complete the Warm-Up activity. When he or she is finished, mark and correct the work with your child. The Answer Key is at the back of this book.



### Exploring the Topic

Today your child will review number words and expanded notation. If your child needs more practice to master either of these skills or the spelling of the number words, allow your child the necessary time needed. You may need to take more than one session to complete all the activities in this lesson.

#### Parent Script:

There are many ways that numbers can be represented.

For example, if there are 6732 people living in a small town, the population can be shown by all of these forms.

#### 1. Using base 10 blocks as models



#### 2. Standard Form

6732

#### 3. Expanded Form

$6000 + 700 + 30 + 2$

#### 4. Words that represent the number

**6732 = six thousand seven hundred thirty-two**

Today we are going to write words for numbers and then write numbers in expanded form.

When we write numbers using words there are several rules to remember. I would like you to read these rules to me.

1. Do not use commas to separate the digits or the words.
2. Do not use the word *and* in the number.
3. Numbers such as **32** and **57** are written with a *hyphen* between each word.

For example, thirty-two, fifty-seven

4. When zeroes are used as place holders they do not appear in the written form

For example, 702 is written **seven hundred two**.



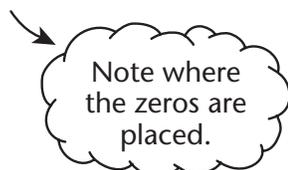
is written 236  
or  
two hundred thirty-six



is written 2403  
or  
two thousand four hundred three



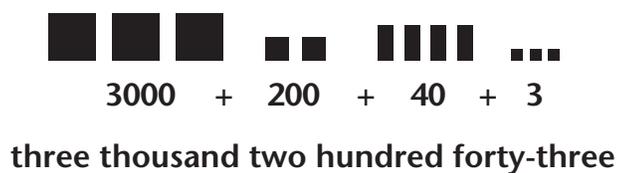
is written 3040  
or  
three thousand forty



You may wish to put these rules in a prominent place for your child to refer to.

Point to the following examples.

Examples:



- 1.
- 2.
- 3.
- 4.

Ask your child to tell you each number that is represented.

Give your child a sheet of paper. Ask your child to write the words for each number.

Print the following numbers on a sheet of paper or on the chalkboard.

**3428      123 000      465 989      804 900**

Ask your child to write the words for each number.

When your child has completed the activity, mark his or her work.

Give your child as much practice as she or he needs to spell all of the number words correctly. Your child can practice these words at any time, for example, while you are driving in the car, going on a walk or at any other suitable time.

Make the time you spend spelling number words short and interesting.



### **It's Your Turn—Part A**

Have your child look at **Part A** on the Lesson 6 Practice Sheet. To make sure your child understands the activity directions help your child to complete the first question. Now ask your child to complete the rest of the section independently.

Mark the activity with your child. Make sure your child completes any needed corrections, then return to this lesson.

**Parent Script:**

Writing out numbers to show their full value is called *expanded notation*. Let's look at these examples.

**Three 100 000s** is the same as  $(3 \times 100\,000)$  or **300 000**

**Four 10 000s** is the same as  $(4 \times 10\,000)$  or **40 000**

**Three 1 000s** is the same as  $(3 \times 1\,000)$  or **3000**

**Two 100s** is the same as  $(2 \times 100)$  or **200**

**Nine 10s** is the same as  $(9 \times 10)$  or **90**

**Eight 1s** is the same as  $(8 \times 1)$  or **8**

You would write the **expanded form** of this number this way:

$$300\,000 + 40\,000 + 3000 + 200 + 90 = 8$$

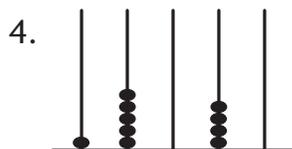
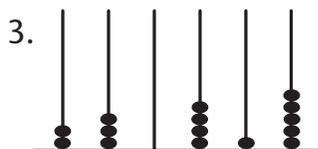
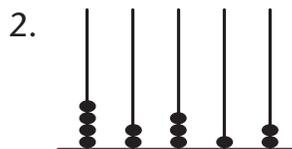
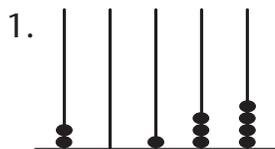
Can you tell me what the number is?

Sometimes people refer to expanded form as **expanded notation**.

If we had to write out numbers like this all the time it would take too long, so we usually write numbers in **standard form**.

The standard form of this number is **343 298**.

Direct your child's attention to the following examples.



Give your child a sheet of paper and ask your child to write the number shown on each abacus in **expanded form**.

Correct your child's completed work. As your child completes each question ask your child to write the standard form of each number under the abacus.

If your child finds writing numbers in expanded form difficult, give your child extra practice using the place value mat and the base 10 blocks.

Many children find it easier to understand the concept of expanded form if they write the words first, then write the numeral and words, and lastly the number in standard form.

For example:

4802 – four thousands, eight hundreds, no tens, two ones  
4 thousands, 8 hundreds, 0 tens, 2 ones =  
 $4000 + 800 + 0 + 2$

**Parent Script:**

Sometimes it might help you to write the expanded form of a number in words first.

Print the following number on the chalkboard or on a sheet of paper.

**3451**

Ask your child to tell you the words to use for each numeral. As your child tells you, write the words on the sheet of paper. If necessary, you can complete the next step and write a combination of numerals and words. The final expanded form of the number, in words, should look like this.

**3451 – three thousands, four hundreds, five tens, one one**

Write the following examples on a sheet of paper or on the chalkboard. Ask your child to complete each one by writing the numbers in expanded form and then writing the number in words.

**5670**

**2206**

**11 983**

**120 652**

Give your child the time needed to grasp the concept of expanded form. Do not move on to the next lesson until your child has mastered this concept.



### **It's Your Turn—Part B**

Direct your child's attention to **Part B** of the Lesson 6 Practice Sheet. Make sure he or she completely understands what is expected in this part. If necessary, help your child to complete the first question. Ask your child to complete the rest of the section independently

Mark the completed work with your child. The correct answers for both parts are in the Answer Key. Make sure your child completes any needed corrections.



### **Challenge Yourself**

Now ask your child to complete the **Challenge Yourself** activity. When your child has completed this section, mark his or her work. The Answer Key is at the back of this book. Help your child to complete any needed corrections.

**Note: It is important that your child has an excellent grasp of each new mathematics skill or concept taught before you move on to the next lesson. You should be able to tell how much extra practice he or she needs as you correct the assigned activities.**

## Lesson 7

# Rounding Numbers



### What You Need

- Practice Sheets
- Blank paper or chalkboard



### Warm-Up

To begin today's lesson, take out the Lesson 7 Practice Sheet and ask your child to complete the Warm-Up activity. When he or she is finished, mark the work with your child.



### Exploring the Topic

#### Parent Script:

Sometimes when we use large numbers we do not always need to know the exact amount. Sometimes we can **estimate** what the number or the amount will be. When you estimate you mentally **round off** numbers to the nearest multiple of 10, 100, 1000 or 10 000.

You can use rounded numbers (or estimates) in everyday life situations.

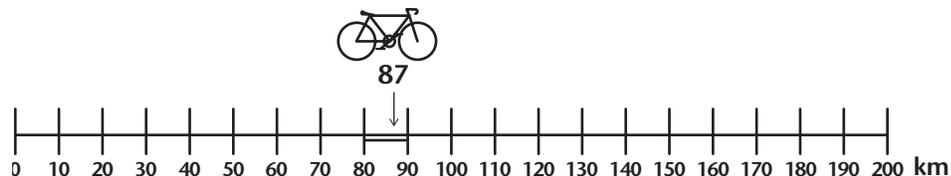
For example:



John went on a biking tour with his family. The number lines below tell you the distance they cycled each day. The number below each bike shows how far he went each day. Under each distance is the rounded number. John might use this rounded number if someone asked about how far he went each day.

Direct your child's attention to the number lines.

### Monday



Ask your child these questions:

How far did John cycle on Monday? (*87 kilometres*)

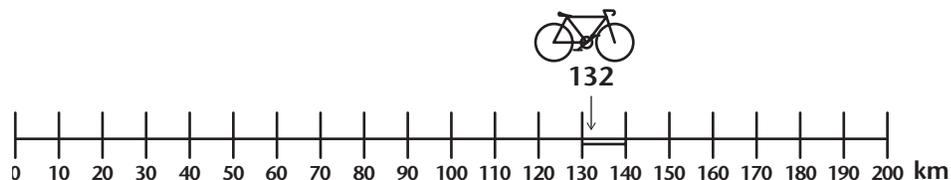
What numbers does 87 lie between? (*80 and 90*)

To what number is 87 closer? (*90*)

So 87 is rounded to the nearest 10 which is 90

About how far would John say he rode on Monday?  
(*90 km*)

### Tuesday



Ask your child to tell you how far John rode, to the nearest 10, on Tuesday.

If your child has difficulty answering, ask your child the following questions.

How far did John ride on Tuesday?

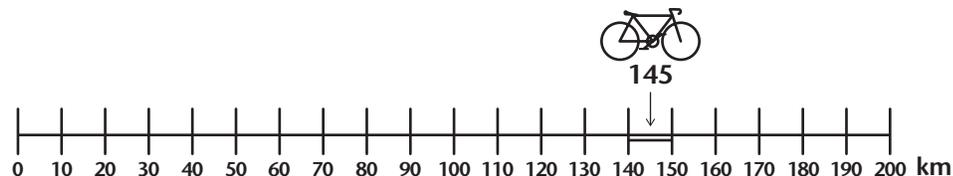
What numbers does 132 lie between? (*130 and 140*)

Is 132 closer to 130 or 140? (*130*)

If 132 is rounded to the nearest 10, what will the number be? (*130*)

Ask your child to look at the distance John rode on Wednesday.

### Wednesday



**Ask:** How far did John ride on Wednesday?

Where does 145 lie between 140 and 150? (*halfway*)

Do you think we would round 145 down to 140 or up to 150? (*up*)

145 will be rounded up to 150 because numbers that end in 5 are always rounded up.

Read the following rules to your child.

#### The Rules

Look to the digit to the right of the place to which the number is to be rounded.

If the number is greater than 5 round up the next higher number.

If the number is 5 (exactly half way) round up to the next higher number.

If the number is less than 5 round down to the lower number.

This rule applies to all multiples of 10. (10's 100's, 100's, 1000's)

Here are some examples:

If a number is 50 or greater round up to the next 10.

If a number is 500 or greater round up to the next 100.

If a number is 5000 or greater round up to the next 1000.

**Note:** When you round to the nearest 10 you have 0 in the ones place.

When you round to the nearest 100 you have 0 in the ones and tens place.

When you round to the nearest 1000 you have 0 in the ones, tens, and hundreds place.

Ask your child to round these numbers to the nearest 10 or 100. Make sure your child understands why he or she is rounding the numbers up or down.

69 \_\_\_\_\_ 187 \_\_\_\_\_ 704 \_\_\_\_\_

198 \_\_\_\_\_ 156 \_\_\_\_\_ 1043 \_\_\_\_\_ 3740 \_\_\_\_\_

11 \_\_\_\_\_ 503 \_\_\_\_\_

Now ask your child to round these numbers to the nearest 1000.

8926 \_\_\_\_\_ 6438 \_\_\_\_\_ 1499 \_\_\_\_\_

1907 \_\_\_\_\_ 2811 \_\_\_\_\_ 81 999 \_\_\_\_\_

If your child finds rounding numbers difficult, remind your child of the rounding rules. Give your child as many examples as needed to master this concept.



### It's Your Turn

Have your child look at this section on the Lesson 7 Practice Sheet. To make sure your child understands the activity directions help your child to complete the first question. Now ask your child to complete the rest of the section independently.

When your child has completed this section, mark his or her work. The Answer Key is at the back of this book. Help your child to complete any needed corrections.



### Challenge Yourself

Now ask your child to complete the **Challenge Yourself** activity.

When your child has completed this section, mark his or her work. Help your child to complete any needed corrections.



To give your child extra practice rounding numbers go to this Web site:

<http://www.funbrain.com/tens/index.html>

Choose the level that best suits your child's ability. If this Web site is not available, type in *Rounding Numbers* in your Search Engine.

## Lesson 8

### Review Lesson

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#### What You Need

- Practice Sheets

There are not any **Warm-Up** or **Challenge Yourself** activities in this lesson.

Today your child will complete a review of the concepts and skills covered so far. Before your child attempts to complete the activities, review any concepts or skills he or she still has difficulty understanding. Do not give your child this review paper unless you are confident he or she can complete it successfully.



#### It's Your Turn

Take out the Lesson 8 Practice Sheet and place it in front of your child. Explain to your child that this review is to be completed independently. Encourage your child to take a few moments to look over the questions. Ask your child if he or she understands what is expected. Give your child as much time as he or she needs to complete the review. If you see your child having any difficulty answering a question, tell your child to leave that question and move on to the next one. When your child has completed all of the questions, encourage your child to look over the work to look for any errors that may have been made. Mark the review paper with your child.

As you mark child's work, you will see which concepts or skills your child has difficulty mastering and need more practice. Make sure your child reviews these skills or concepts before he or she begins the next lessons in the Addition section.

## Pre-Test

# Basic Addition Facts to Eighteen

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Before your child begins the addition section of this package you will administer the following Pre-Test.

Place the Pre-Test in front of your child. Explain that he or she is to answer as many questions as possible and to stop working when he or she cannot complete any more questions. Do not help your child to complete any of the questions. If you assist your child, you will not get a true picture of your child's understanding of addition skills. Give your child as much time as he or she needs to complete the test. **Your child is not to use a calculator.**

When your child has completed the test, mark his or her work. The Answer Key is at the back of the book. When you see the results of the test, you should have a good indication of the skills your child needs to concentrate on. You will notice the test is divided into sections with the corresponding lesson names and numbers noted. The results of this Pre-Test will indicate where your child needs to start in the Addition section.

## Pre-Test— Basic Addition Facts to Eighteen

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### Part A

(These skills are covered in Lessons 9 and 10.)

Answer the following questions as quickly as possible. This is not a timed test.

1.  $7 + 9 =$       2.  $6 + 7 =$       3.  $9 + 10 =$       4.  $9 + 4 =$       5.  $5 + 7 =$

6.  $7 + 9 =$       7.  $9 + 9 =$       8.  $6 + 6 =$       9.  $9 + 3 =$       10.  $7 + 8 =$

11.  $5 + 9 =$       12.  $7 + 4 =$       13.  $6 + 9 =$       14.  $4 + 2 =$       15.  $5 + 10 =$

16.  $7 + 6 =$       17.  $9 + 5 =$       18.  $6 + 8 =$       19.  $2 + 3 =$       20.  $5 + 8 =$

21.  $9 + 8 =$       22.  $6 + 5 =$       23.  $9 + 2 =$       24.  $7 + 5 =$       25.  $5 + 3 =$

### Adding Zeroes

Find the answers to these equations. Do all the work in your head.

**Example:**  $300 + 500 + 50 + 10 = 860$

1.  $400 + 700 + 50 =$  \_\_\_\_\_

2.  $80 + 200 + 10 =$  \_\_\_\_\_

3.  $70 + 1000 + 1000 =$  \_\_\_\_\_

4.  $2000 + 200 + 90 =$  \_\_\_\_\_

5.  $13\,000 + 2000 + 600 + 70 + 10 =$  \_\_\_\_\_

## Part B—Breaking Numbers Apart

(These skills are covered in Lessons 11 and 12.)

**Example:**  $73 + 26 = ?$

$70 + 26 = 96$  Take the 3 away, then add

$96 + 3 = 99$  Add the 3 back onto the number.

$70 + 29 = 99$

Break the number apart, then add. Write the answers on the lines. Show your work.

1.  $25 + 19 =$  \_\_\_\_\_

2.  $83 + 16 =$  \_\_\_\_\_

3.  $37 + 22 =$  \_\_\_\_\_

4.  $46 + 52 =$  \_\_\_\_\_

5.  $71 + 18 =$  \_\_\_\_\_

## Friendly Numbers

**Example:**  $75 + 25 = 100$

$350 + 600 = 1000$

1. Write the friendly numbers to 100.

a.  $45 +$  \_\_\_\_\_  $= 100$

b.  $80 + \underline{\hspace{2cm}} = 100$

c.  $0 + \underline{\hspace{2cm}} = 100$

d.  $75 + \underline{\hspace{2cm}} = 100$

e.  $50 + \underline{\hspace{2cm}} = 100$

2. Write the friendly numbers to 1000.

a.  $500 + \underline{\hspace{2cm}} = 1000$

b.  $225 + \underline{\hspace{2cm}} = 1000$

c.  $450 + \underline{\hspace{2cm}} = 1000$

d.  $1000 + \underline{\hspace{2cm}} = 1000$

e.  $775 + \underline{\hspace{2cm}} = 1000$

**Part C—Adding 2- and 3-digit Numbers Without Regrouping**

(These skills are covered in Lessons 13, 14 and 15.)

**Example:** 
$$\begin{array}{r} 25 \\ +64 \\ \hline \end{array}$$

1. Line up the digits, then find the answers to these equations. Show your work.

a.  $27 + 42 =$

b.  $53 + 46 =$

c.  $72 + 34 =$

d.  $35 + 34 =$

e.  $22 + 36 + 11 =$

2. Find the sum.

**Example:** 
$$\begin{array}{r} 245 \\ +304 \\ \hline \end{array}$$

1. 
$$\begin{array}{r} 111 \\ +203 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 461 \\ +320 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 344 \\ +432 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 604 \\ +71 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 868 \\ +120 \\ \hline \end{array}$$

3. Find the answers to the following questions.

**Example:** 
$$\begin{array}{r} 5604 \\ +2063 \\ \hline 7667 \end{array}$$

a. 
$$\begin{array}{r} 2044 \\ +3712 \\ \hline \end{array}$$

b. 
$$\begin{array}{r} 6700 \\ +1198 \\ \hline \end{array}$$

c. 
$$\begin{array}{r} 4234 \\ +5742 \\ \hline \end{array}$$

d. 
$$\begin{array}{r} 7213 \\ +765 \\ \hline \end{array}$$

e. 
$$\begin{array}{r} 3704 \\ +4165 \\ \hline \end{array}$$

### Part D—Adding 2- and 3-digit Numbers With Regrouping

(These skills are covered in Lessons 17, 18, 19 and 20.)

1. Complete each question by adding 10 ones for 1 ten. Remember to show your carrying figures.

Example: 
$$\begin{array}{r} \phantom{0}1 \\ 378 \\ +207 \\ \hline 585 \end{array}$$

a. 
$$\begin{array}{r} 463 \\ +218 \\ \hline \end{array}$$

b. 
$$\begin{array}{r} \$523 \\ +409 \\ \hline \end{array}$$

c. 
$$\begin{array}{r} 425 \\ +269 \\ \hline \end{array}$$

d. 
$$\begin{array}{r} 555 \\ +305 \\ \hline \end{array}$$

e. 
$$\begin{array}{r} \$672 \\ +318 \\ \hline \end{array}$$

2. Complete each question by trading 10 ones for 1 ten and 10 tens for 1 one hundred.

Example: 
$$\begin{array}{r} \phantom{0}11 \\ 567 \\ +298 \\ \hline 867 \end{array}$$

a. 
$$\begin{array}{r} 378 \\ +267 \\ \hline \end{array}$$

b. 
$$\begin{array}{r} 456 \\ +278 \\ \hline \end{array}$$

c. 
$$\begin{array}{r} 789 \\ +297 \\ \hline \end{array}$$

d. 
$$\begin{array}{r} 539 \\ +173 \\ \hline \end{array}$$

e. 
$$\begin{array}{r} 128 \\ +195 \\ \hline \end{array}$$

3. Complete each equation by trading 10 ones for 1 ten, 10 tens for 1 one hundred and 10 one hundreds for one thousand.

Example: 
$$\begin{array}{r} 111 \\ 5678 \\ +1589 \\ \hline 7267 \end{array}$$

a. 
$$\begin{array}{r} 2634 \\ +1789 \\ \hline \end{array}$$

b. 
$$\begin{array}{r} 4379 \\ +1078 \\ \hline \end{array}$$

c. 
$$\begin{array}{r} 2777 \\ +3898 \\ \hline \end{array}$$

d. 
$$\begin{array}{r} 4639 \\ +2065 \\ \hline \end{array}$$

e. 
$$\begin{array}{r} \$6780 \\ +937 \\ \hline \end{array}$$

## Lesson 9

# Basic Addition Facts to 18

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### What You Need

- Practice Sheets
- Teaching Aids
  - Addition flashcards
- Blank paper or chalkboard



### Exploring the Topic

To ensure success in Mathematics, and before your child can add large numbers, it is important that he or she has automatic (instant) recall of the basic addition facts to eighteen. If your child does not have automatic recall of these basic facts, you will need to spend the necessary time to make sure these number facts are in place.

Here are some suggestions to help your child master the basic number facts to eighteen. It is important that the time your child spends learning these facts is short, varied, and interesting.

### Three-minute Flashcard Drill

For this activity you will need the addition flashcards to 18 and two containers, one labeled *Practice*, the other labeled *I Know*. Time your child for three minutes. Flash each card for three seconds. If your child answers correctly within the three seconds, place the flashcard in the *I Know* container. If your child is unable to answer correctly, say the answer, then turn the card over and ask him or her repeat the entire equation. You will find these flashcards in the Teaching Aids section.

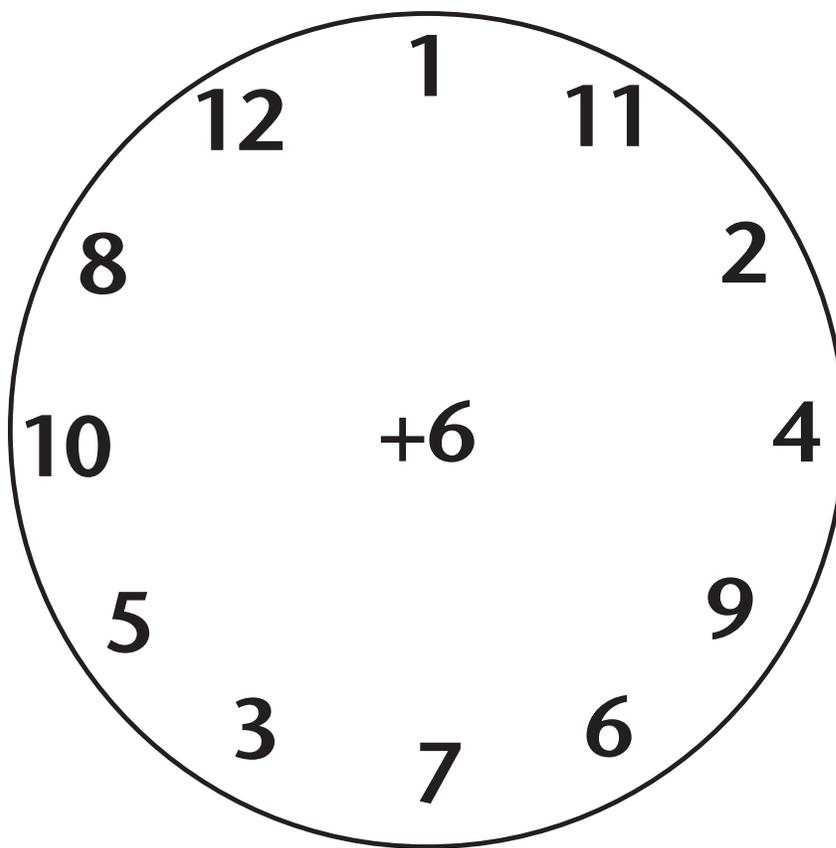
### Card Games

You will find ideas for card games such as *Twenty-One* and *Crib* in the Games section.

## Timed Tests

Your child can either say or write the answers to these timed tests.

1. Draw a clock face on a sheet of paper or on a chalkboard. Randomly scatter the numbers from 1- 12 around the clock face. In the center of the clock write a number, such as, + 6. Explain to your child that he or she has three minutes to add this number to each of the numbers around the clock.



2. On a sheet of paper or on a chalkboard write ten to twenty basic facts equations. Give your child two or three minutes to write the answers. You can shorten the length of time as your child masters the basic number facts.

3. On a sheet of paper or on the chalkboard ask your child to write the numbers one through twelve as a list. Ask your child to write the answers to twelve addition equations you say.

### Column Adding

Write several examples of column addition on the chalkboard or on a sheet of paper for your child to solve.

For example:

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

### Missing Numbers

On a sheet of paper or on a chalkboard write examples of addition equations with one number missing. Ask your child to complete each equation by filling in the missing number.

For example:  $2 + \underline{\quad} = 8$ ,  $\underline{\quad} + 4 = 13$



### Online Computer Games

*Fast Car Racing* can be found at this Web site.

<http://www.funbrain.com/osa/index.html>

If this Web site is not available, type in *Fast Car Racing* or *Addition Games* into your search engine. You will find other addition games in the Web sites section at the beginning of Part 1.



### It's Your Turn

Before your child completes the activities in this section on the Lesson 9 Practice Sheet make sure that he or she understands the meaning of the following mathematics terms. You will find the definitions for these terms in the **Glossary** at the back of this package:

- addition
- addend
- total
- equation
- sum

If your child has difficulty answering these questions on the Practice Sheet, you may have to give him or her extra practice examples using concrete objects before he or she attempts to complete this activity independently.

When your child has completed this section, mark his or her work. Help your child to complete any needed corrections. From the work your child completes you should be able to assess how much practice he or she needs to recall these basic number facts to eighteen automatically.



There will not be a **Challenge Yourself** activity in today's lesson.

## Lesson 10

# Number Sense—Adding Zeroes



### What You Need

- Practice Sheets
- Teaching Aids
  - Addition flashcards
- Blank paper or chalkboard



### Warm-Up

If necessary, before your child completes the Warm-Up activity give her or him some time to practice the basic addition facts to 18. Use some of the ideas outlined in Lesson 9.

Take out the Lesson 10 Practice Sheet and ask your child to complete the Warm-Up activity. When he or she is finished, mark the work with your child. The Answer Key is at the back of this book.



### Exploring the Topic

#### Parent Script:

You don't always need pen and paper to complete all of your mathematics questions. You really have a lot of information *in your head*, don't you? You already know that  $15 + 5$  is equal to 20. You don't need to use counting blocks or your fingers to answer that question. You know in your head that  $15 + 5$  will always equal 20. You also know that *ten groups of ten are equal to 100* and that answer will never change.

Now it is time to develop a number sense that will help you to speed up your mathematics skills. You need to learn some short cuts and tricks that you can rely on to always give you the correct answer in the shortest possible time.



Write the following example on a sheet of paper or on the chalkboard.

$$200 + 300 + 90 = \underline{\quad}$$

**Parent Script:**

You could rewrite the equation using a place value mat or write it in columns then add up each of the columns – but that can be a waste of time. You can do the question more easily.

There are two steps!

First you add up all the hundreds

$$200 + 300 = 500$$

Now add whatever remains to the 500.

$$500 + 90 = 590$$

You didn't even need a pencil to solve the question, did you?

Point to the next equation and ask your child to solve the question in her or his head.

$$1000 + 5000 + 700 =$$

Remind your child of the two steps.

Add the thousands first.

$$1000 + 5000 = 6000$$

Add whatever remains

$$6000 + 700 = 6700$$

If your child needs more practice solving this type of equation, give her or him the necessary time needed to master this skill.

**Parent Script:**

Sometimes you can use your knowledge of the expanded form of numbers to do math calculations in your head.

Look at this question

$$1226 + 5143 = \underline{\hspace{2cm}}$$

Can you see a quick way to add these numbers in your head?

First think of each number in its expanded form

$$1226 = 1000 + 200 + 20 + 6$$

$$+ \quad + \quad + \quad +$$

$$5143 = 5000 + 100 + 40 + 3$$

Add the two lines together.

$$6000 + 300 + 60 + 9 = 6369$$

For really shortcut mental adding you could just think:

$$5+1 = 6 \quad 2+1 = 3 \quad 2+4 = 6 \quad 6+3 = 9 \quad \text{OR} \quad 6369$$

**Basic Addition Facts Help**

Knowing the basic addition facts can help you do mental arithmetic.

$$5 + 7 = 12$$

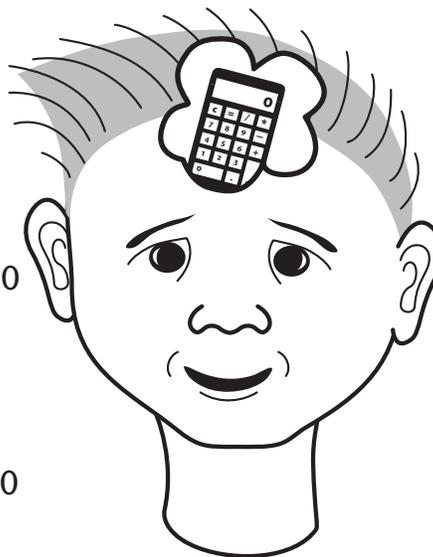
$$\overset{\curvearrowright}{45} + 7 = 40 + 12 = 52$$

$$450 + 70 = 400 + 120 = 520$$

$$8 + 9 = 17$$

$$\overset{\curvearrowright}{68} + 9 = 60 + 17 = 77$$

$$680 + 90 = 600 + 170 = 770$$



Knowing basic addition facts such as those shown above make it easy to add numbers in the hundreds and thousands.

Let's try another one! See how fast you can get the answer to this equation.

$$2245 + 7234$$

What will you do first? (Write out the number in expanded form.)

$$2245 = 2000 + 200 + 40 + 5$$

+       +       +       +

$$7234 = 7000 + 200 + 30 + 4$$

$$9000 + 400 + 70 + 9 \quad \text{OR} \quad 9479$$

The shortcut mental adding would be

$$2 + 7 = 9 \quad 2+2=4 \quad 4+3=7 \quad 5 + 4 =9 \quad \text{OR} \quad 9479$$

Have your child complete as many examples of this skill as are necessary.



### It's Your Turn

Have your child look at this section on the Lesson 10 Practice Sheet. To make sure your child understands the activity directions help him or her to complete the first question in each section. Now ask your child to complete the rest of the section independently.

When your child has completed this section, mark his or her work. Help your child to complete any needed corrections.



### Challenge Yourself

Now ask your child to complete the **Challenge Yourself** activity.

When your child has completed this section, mark his or her work. Help your child to complete any needed corrections.

## Lesson 11

# Number Sense—Breaking Numbers Apart



### What You Need

- Practice Sheets
- Teaching Aids
  - Addition flashcards
- Blank paper or chalkboard



### Warm-Up

Before your child completes the Warm-Up activity give her or him some time to practice the basic addition facts to 18. Give your child some column addition questions to solve.

Take out the Lesson 11 Practice Sheet and ask your child to complete the Warm-Up activity. When he or she is finished, mark the work with your child. The Answer Key is at the back of this book.



### Exploring the Topic

#### Parent Script:

In the last lesson you learned how to use some mental shortcuts to solve equations. Today you are going to look at another way you can find the answers to addition equations in your head.

Sometimes it is easier to break numbers apart and then group the tens and ones together before you complete the question.

Look at this equation.

$$42 + 36$$

How do you think I can break these numbers apart?

First I will break the number 42 into  $40 + 2$ . Tuck the 2 in the back of my mind.

Now I will add the remaining number to the 40.

$$40 + 36 = 76$$

Is there anything else I must do? Right! I have to add in the 2.

$$76 + 2 = 78$$

$$\text{So } 42 + 36 = 78$$

Even though the problem looked hard, wasn't it easy to do when I broke the numbers apart?

Now let's look at this question.

$$73 + 25 = ?$$

What is the first thing you will do? (*break the numbers apart*)

Which number will you break apart? (*73*)

Keep the 70 and tuck away the 3.

What will you do now? (*add the remaining number to 70*)

$$70 + 25 = 95$$

What will you do next? (*add in the 3*)

$$95 + 3 = 98$$

$$\text{So } 73 + 25 = 98$$

Let's do one more. Tell me what you will do in each step.

$$25 + 63 =$$

$$20 + 63 = 83$$

$$83 + 5 = 88$$

$$\text{So } 25 + 63 = 88$$

Give your child as much practice as he or she needs breaking numbers apart.



### It's Your Turn

Have your child look at this section on the Lesson 11 Practice Sheet. If your child has difficulty completing these questions, you may need to give him or her extra practice before he or she completes the activity. When you are satisfied your child completely understands what is required, ask him or her to complete the section independently.

When your child has completed this section, mark his or her work. Help your child to complete any needed corrections.



### Challenge Yourself

Now ask your child to complete the **Challenge Yourself** activity.

When your child has completed this section, mark his or her work. Help your child to complete any needed corrections.

As your child works through the assignments in the Lesson Practice Sheets, make a note of any difficulties he or she may encounter. Make sure that you review the concepts your child has difficulty with on a regular basis. Most children need constant review of the math concepts and skills they are taught.

## Lesson 12

# Number Sense—Friendly Numbers



### What You Need

- Practice Sheets
- Teaching Aids
  - Addition flashcards
- Blank paper or chalkboard



### Warm-Up

Today your child will complete two speed drills on basic facts. Take out the Lesson 12 Practice Sheet and ask your child to complete the Warm-Up activity. When he or she is finished, mark the work with your child.



### Exploring the Topic

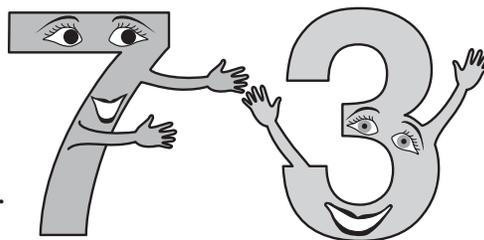
#### Parent Script:

Today you will look at another strategy that will help you add large numbers. This strategy involves the use of *Friendly Numbers* or *Friendly Sums*. Let's look at these illustrations .

Read the information on the next page your child. As you read, ask him or her to give you as many sets of friendly number sums as he or she can.

### Friendly Sums of 10

$7 + 3$  are friendly numbers because when they are added together they equal 10.

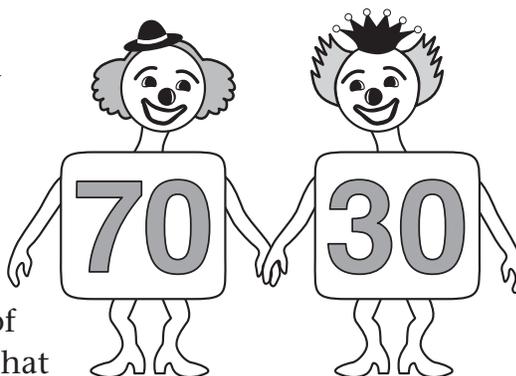


$8 + 2$  are also friendly numbers.

Can you think of other sets of numbers which are friendly?

### Friendly Sums of 100

$70 + 30$  are friendly numbers because when they are added together they equal 100.

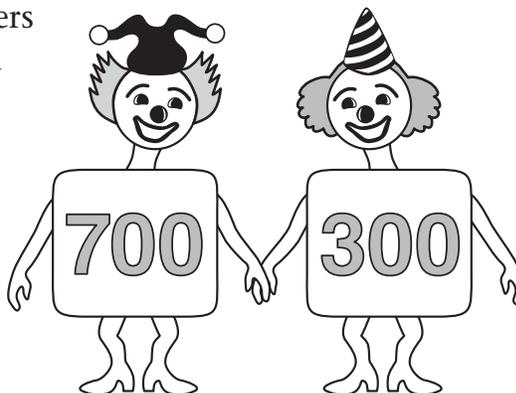


$60 + 40$  are also friendly numbers.

Can you think of other sets of numbers which are friendly that equal 100?

### Friendly Sums of 1000

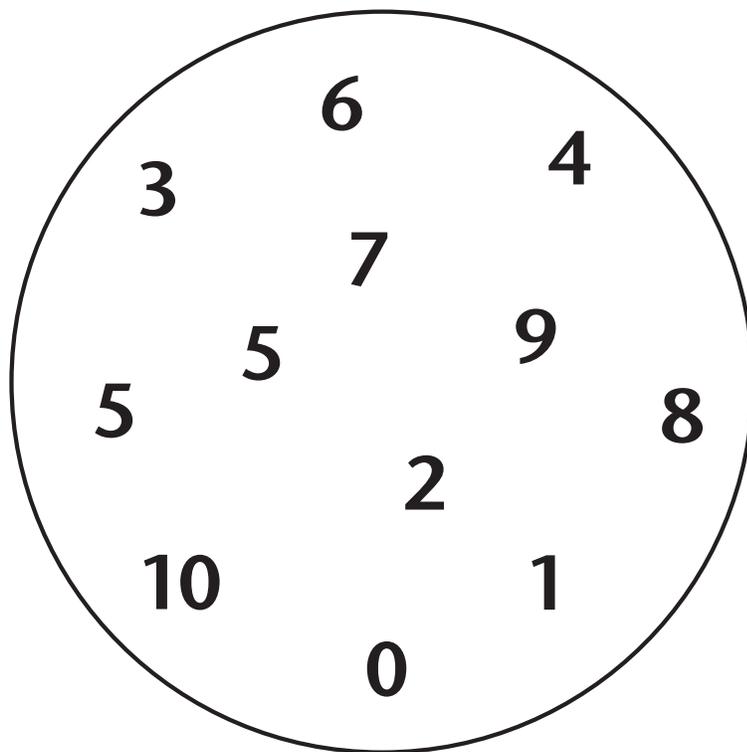
$700 + 300$  are friendly numbers because when they are added together they equal 1000.



$500 + 500$  are also friendly numbers of 1000.

Let's see how many friendly sums you know.

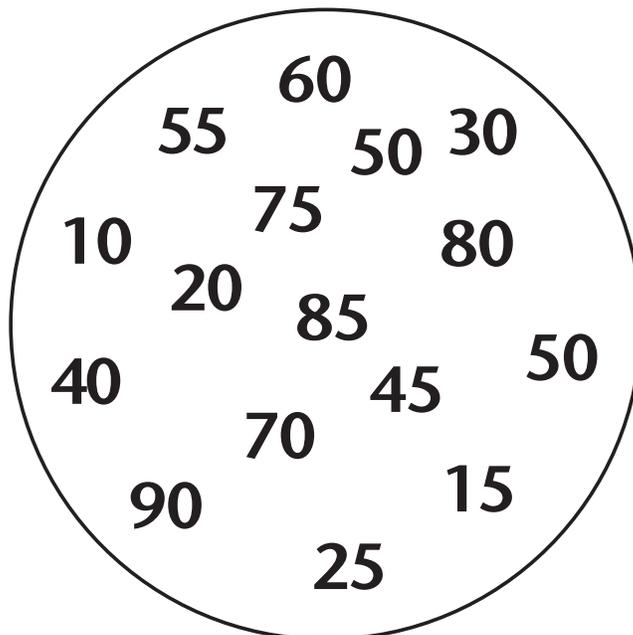
Give your child a sheet of paper. Direct his or her attention to the number bubbles below.



- A. Ask your child to write down all the friendly number sums to 10 she or he can find in this bubble.

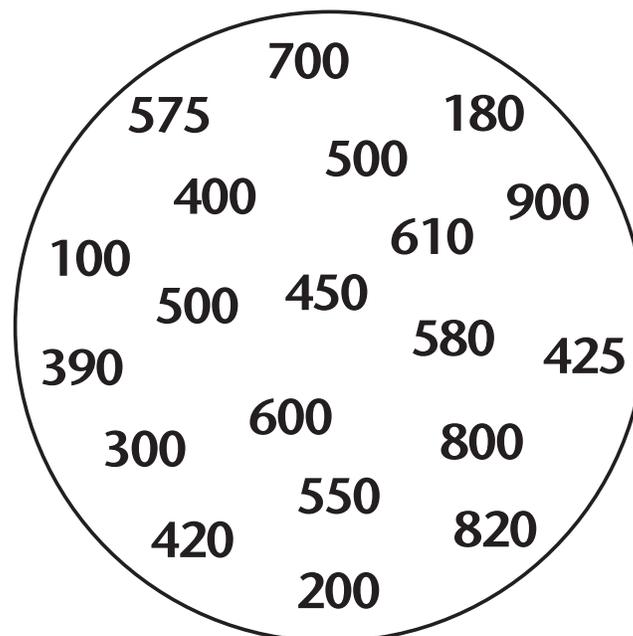
Check your child's answers.

- B. Now have your child write down all friendly number sums to 100 in this bubble.



Check your child's answers.

- C. Ask your child write down all friendly number sums to 1000 in this bubble.



Check your child's answers.

Give your child as much practice as he or she needs to master this skill. Your child will also need to practice using friendly numbers that end in 5 to make sums to 100 or 1000.

For example:  $75 + 25 = 100$ ,  $85 + 15 = 100$ ,  $655 + 345 = 1000$ ,  
 $275 + 725 = 1000$

D. Direct your child to the examples below. Explain to your child that sometimes it is easier to add three numbers together if you find the friendly sum first, and then add on the third number.

$$\begin{array}{c} 100 + \\ \curvearrowright \\ \text{a. } 60 + 38 + 40 = 100 + 38 = 138 \end{array}$$

$$\begin{array}{c} 10 + \\ \curvearrowright \\ \text{b. } 3 + 19 + 7 = 10 + 19 = 29 \end{array}$$

$$\begin{array}{c} 1000 + \\ \curvearrowright \\ \text{c. } 750 + 172 + 250 = 1000 + 172 = 1172 \end{array}$$



### It's Your Turn

Have your child look at this section on the Lesson 12 Practice Sheet. If your child has difficulty completing these questions, you may need to give him or her more practice using Friendly Numbers. When you are satisfied that your child feels confident adding Friendly Numbers, ask him or her to complete the section independently.

When your child has completed this section, mark his or her work. Help your child to complete any needed corrections.



### Challenge Yourself

Now ask your child to complete the **Challenge Yourself** activity.

When your child has completed this section, mark his or her work. Help your child to complete any needed correction

**Note: it is important that your child has an excellent grasp of each new mathematics skill or concept taught before you move on to the next lesson.**

## Lesson 13

# Adding 2-Digit Numbers—Without Regrouping or Trading

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### What You Need

- Practice Sheets
- Teaching Aids
  - Addition flashcards
  - Base 10 blocks
  - Place value mat
- Blank paper or chalkboard

Begin today's activities with a three-minute flashcard drill.



### Warm-Up

Before your child completes the Warm-Up activity, review estimating sums by adding multiples of ten and rounding numbers to the nearest, 10, 100, and 1000. Then, ask your child to complete the Warm-Up activity.



### Exploring the Topic

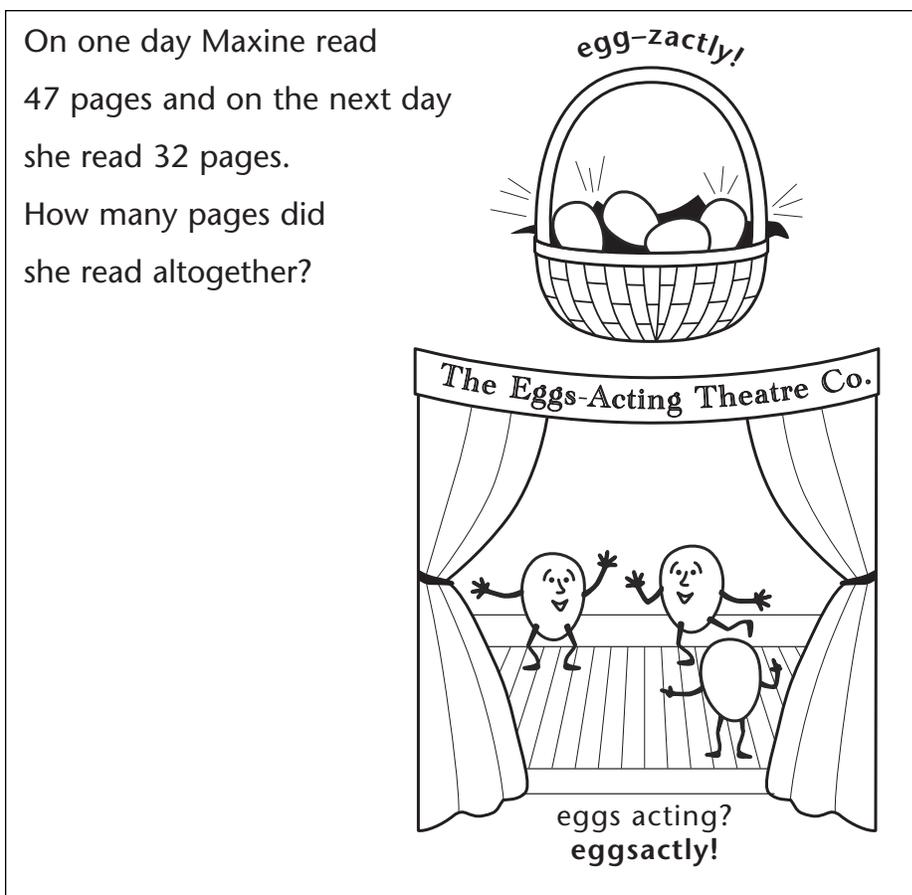
#### Parent Script:

In the past few lessons you have learned some strategies that can help you add numbers. Can you tell me what some of them are? (*estimating, rounding, writing numbers in expanded form, breaking numbers apart, and friendly numbers*)

In the Warm-Up you used estimation and rounding. In this lesson you will work with exact sums.

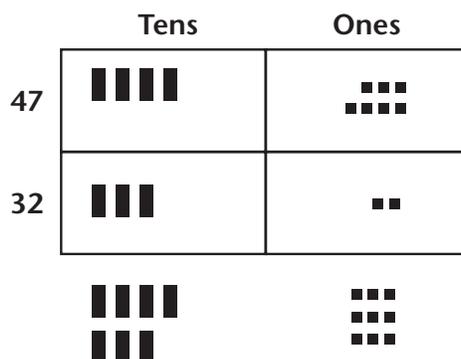
On one day Maxine read 47 pages and on the next day she read 32 pages.

How many pages did she read altogether?



Take out the base 10 blocks and the place value mat. Encourage your child to use the base 10 blocks. Using concrete representations will help your child to visualize the process when he or she needs to regroup numbers.

Show your child how to solve the problem using the base 10 blocks and the place value mat. If your child does not need to use the base 10 blocks draw a place value chart for him or her to use.



**Parent Script:**

The first day Maxine read 47 pages. How many tens and how many ones is that? (*4 tens, 7 ones*)

Put the correct number of base 10 blocks in the correct place on the place value mat. (or the numbers in the correct places on the place value chart)

How many pages did she read on the second day? How many tens and ones are there in 32? (*3 tens, 2 ones*)

Put the correct number of base 10 blocks in the correct place on the place value mat below the first set of base 10 blocks (or on the chart).

Now add the two sets of base 10 blocks together. How many ones do you have altogether? (*9 ones*)

How many tens do you have altogether? (*7 tens*)

What number is 7 tens and 9 ones? (*79*)

How many pages did Maxine read exactly?

Your child's place value mat or chart should look like this.

Tens	Ones
4	7
+ 3	2
7	9

On a sheet of paper or on the chalkboard write the following equations. Ask your child to use her or his base 10 blocks place value mat or chart to find the answers to the addition questions.

$$57 + 20 = \quad 18 + 41 = \quad 63 + 34 =$$

Give your child as much practice she or he needs to add 2-digit numbers. If your child has difficulty using a place value mat, you can draw a blank abacus and have him or her draw the number of beads on the appropriate pole of the abacus.

**Parent Script:**

Now I am going to show you a different way to write these equations.

Look at this number sentence (equation).

$$31 + 25$$

Watch while I write it a different way.

$$\begin{array}{r} 31 \\ +25 \\ \hline \end{array}$$

Writing addition equations (number sums) up and down (vertically) instead of across (horizontally) can make the equations easier for you to solve. When you write the equation, you must make sure that the ones and the tens are lined up under each other.

Look at this chart.

T	O
3	1
+ 2	5
5	6

You can make your own place-value chart to help you line up the numbers. You can use a **T** for tens, and **O** for ones.

Ask your child to draw several place value charts and then solve the following equations.

$$43 + 56 = \quad 71 + 32 = \quad 82 + 15 =$$

Give your child as much practice as she or he needs to master this skill.



### It's Your Turn

Have your child look at this section on the Lesson 13 Practice Sheet. If your child has difficulty adding 2-digit numbers questions, give him or her extra practice before he or she completes the activity. Ask your child to complete the section independently.

When your child has completed this section, mark his or her work. Help your child to complete any needed corrections.



### Challenge Yourself

Now ask your child to complete the **Challenge Yourself** activity. When your child has completed this section, mark his or her work. Help your child to complete any corrections.

## Lesson 14

# Adding 3-Digit Numbers—Without Regrouping or Trading

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### What You Need

- Practice Sheets
- Teaching Aids
  - Addition flashcards
  - Place value mat
  - Base 10 blocks
  - Addition Game
  - Coins
  - Calculator
- Blank paper or chalkboard



### Warm-Up

Before your child completes the Warm-Up activity, ask her or him to play the Addition Game.

### Addition Game

#### What You Need

- addition game card
- a coin
- sheet of paper
- pencil
- calculator (optional)

#### How to Play

1. This game can be played alone or with a partner.
2. Player closes his or her eyes and flips the coin onto the game card.
3. Write down the number on a sheet in the square where the coin landed.
4. Flip the coin again and write down the number where the coin lands this time.

5. Add the two numbers together.
6. If the coin lands on or between two numbers, write the number that most of the coin is on.
7. Ask a parent or use the calculator to check your answers.
8. Play until you have completed at least six addition sums.

When the game is over, take out the Lesson 14 Practice Sheet and ask your child to complete the Warm-Up activity. When he or she is finished, mark the work with your child. Ask your child to complete any needed corrections.



### Exploring the Topic

**Parent Script:**

Maxine read 77 pages of her book the first week of the Read-a-thon. In the second week she read 112 pages.

How many pages did Maxine read in the first two weeks?

Take out the place value mat and the base 10 blocks and place them in front of your child.

**Parent Script:**

How many pages did Maxine read the first week? (*77*)

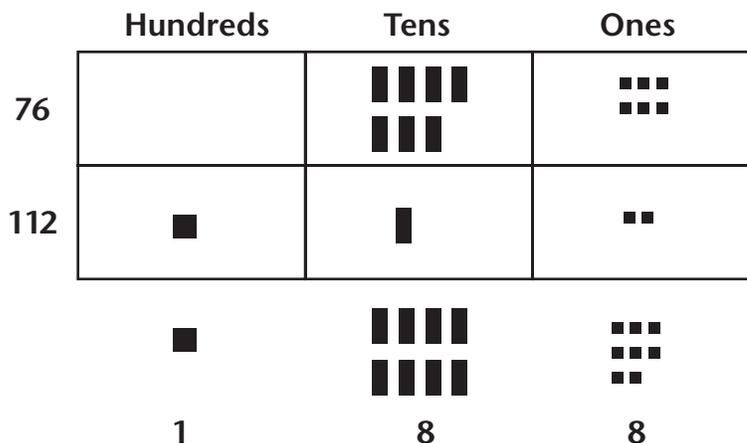
How many pages did she read the second week? (*112*)

How will we find out how many pages she read altogether?

Write the following equation on the chalkboard or on a sheet of paper.

$$77 + 112 =$$

Show your child how to solve the problem using the base 10 blocks and the place value mat or the place value chart.



Write the following equation on a sheet of paper or on the chalkboard.

$$227 + 341 =$$

**Parent Script:**

Let's use the place value mat and the base 10 blocks or the place value chart to solve this equation.

First make 227 on your place value mat. Now make 341. Put the two groups together.

How many of each block do you have now?

How many hundreds? . . . tens? . . . ones?

What is the answer? (568)

If your child is using the chart follow the steps above, only write the numbers in the correct positions.

Now ask your child to solve the following addition equations using the place value mat and the base 10 blocks or the place value chart.

$$210 + 157 = \quad 181 + 312 = \quad 426 + 581 =$$

Give your child as much help as she or he may need to solve these equations.

**Parent Script:**

Do you remember how we write addition sums in a different way?

Look at this number sentence (equation).

$$314 + 251$$

Watch while I write it a different way.

$$\begin{array}{r} 314 \\ +251 \\ \hline \end{array}$$

As you know, writing addition equations (number sentences) up and down (vertically) instead of across (horizontally) can make the equations easier to solve. When you write the equation, you must make sure that the ones, tens, and hundreds are lined up with each other.

Direct your child's attention to the following illustration.

Hundreds	Tens	Ones
3	1	4
+ 2	5	1
5	6	5

**Parent Script:**

To find the total; you add the ones, then the tens, then the hundreds.

Do you remember how you can make your own place-value chart to help you line up the numbers? You can use an **H** for hundreds, **T** for tens, and **O** for ones.

This is how you would solve  $314 + 251 =$  if you used a place value chart.

H	T	O
3	1	4
+ 2	5	1
5	6	5

Ask your child to draw several place value charts and then solve the following equations.

$$345 + 320 = \quad 872 + 107 = \quad 461 + 37 =$$

Give your child as much practice as she or he needs to master this skill. As your child becomes more confident adding large numbers, she or he may not need to use the place value chart or the place value mat and the base 10 blocks.



### It's Your Turn

Have your child look at this section on the Lesson 14 Practice Sheet. To make sure your child understands the activity directions help him or her to complete the first question. Ask your child to complete the rest of the section independently.

When your child has completed this section, mark his or her work. Help your child complete any needed corrections.



### Challenge Yourself

Now ask your child to complete the **Challenge Yourself** activity.

When your child has completed this section, mark his or her work. Help your child complete any needed corrections.

## Lesson 15

# Adding 4-Digit Numbers—Without Regrouping or Trading

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### What You Need

- Practice Sheets
- Teaching Aids
  - Addition flashcards
  - Place value mat
  - Base 10 blocks
- Blank paper or chalkboard



### Warm-Up

Before your child completes the Warm-Up activity give him or her some time to play Addition Concentration. You will find the directions for the game in the Games section.

Take out the Lesson 15 Practice Sheet and ask your child to complete the Warm-Up activity. When he or she is finished, mark the work with your child.



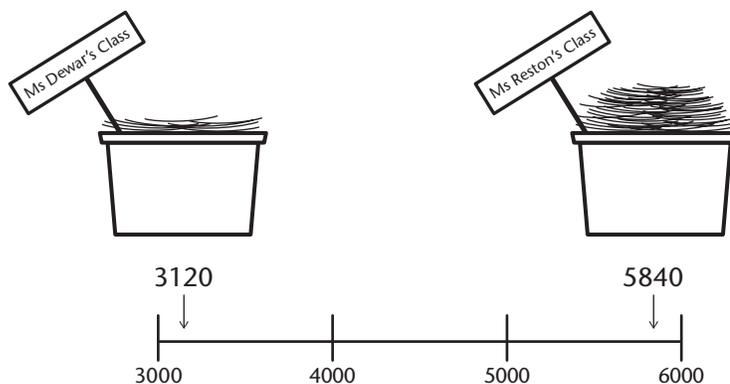
### Exploring the Topic

Before you begin today's lesson, give your child some practice rounding numbers to the nearest 1000.

Read this problem to your child.

*Two classes at a school collected recyclable paper from September to December. Ms Dewar's class collected 3120 pieces of paper while Ms Restan's class collected 5840 pieces of paper.*

Draw the following number line on a sheet of paper or on the chalkboard.

**Parent Script:**

Ms Dewar's class collected 3120 papers. If I rounded that number to the nearest 1000, what would the estimated number be? (*3000*)

Ms Reston's class collected 5840 papers. If I rounded that number to the nearest 1000, what would the estimated number be? (*6000*)

About how many papers did they collect altogether? (*9000*)

When you round 4-digit numbers such as 5150, ask yourself: "Is it closer to 5000 or 6000?" If your child cannot tell you the answer remind her or him of the rounding rules.

Numbers between 0 and 499 round *down* while numbers between 499 and 999 round *up*. Therefore 5150 is rounded down to 5000 and 5779 is rounded up to 6000.

**Parent Script:**

Is 2750 rounded to 2000 or 3000? *(It is rounded up to 3000 because it is closer to 3000 than 2000.)*

Is 7550 rounded to 7000 or 8000? *(It is rounded up to 8000 because it is closer to 8000 than 7000.)*

Is 4125 rounded to 4000 or 5000? *(It is rounded down to 4000 because it is closer to 4000 than 5000.)*

Give your child as many examples of rounding as he or she needs.

Write the following equation on the chalkboard or on a sheet of paper. Ask your child to solve the equation using the place value mat and the base 10 blocks, or the place value chart.

$$1240 + 1357 =$$

When your child has solved the equation, the place value mat should look like the samples below.

	Thousands	Hundreds	Tens	Ones
1240				
+ 1357				
				
	2 thousands	5 hundreds	9 tens	7 ones

Now ask your child to draw a place value chart like the one on the next page and write the numbers in the correct spaces on the chart. Your child can write T, H, T, O at the top of the chart instead of writing the full words each time.

Thousands	Hundreds	Tens	Ones

Remind your child to line up the numbers correctly – the ones under the ones, tens under the tens, hundreds under the hundreds, and the thousands under the thousands.

Write the following equations on the chalkboard or on a sheet of paper. Ask your child to solve the equations using the place value mat and the base 10 blocks, or to make the place value chart. Give your child as much help as he or she needs.

$$2345 + 3254 = \quad 6632 + 2356 = \quad 4208 + 6500 =$$



### It's Your Turn

Have your child look at this section on the Lesson 15 Practice Sheet. If your child has difficulty answering these questions, give him or her extra practice adding 4-digit numbers using the base 10 blocks. When your child is ready, ask him or her to complete the section independently.

When your child has completed this section, mark his or her work. Help your child to complete any needed corrections.



### Challenge Yourself

Now ask your child to complete the **Challenge Yourself** activity.

When your child has completed this section, mark his or her work. Help your child to do any needed corrections.

## Lesson 16

### Review Lesson

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#### What You Need

- Practice Sheets

In this lesson your child will complete the questions on the review paper. There will not be any Warm-Up or Challenge Yourself activities in this lesson. Before your child attempts to complete the paper, review any concepts or skills your child still has difficulty understanding. Do not give your child this review paper unless you are confident he or she can complete it successfully.



#### It's Your Turn

Take out the Lesson 16 Practice Sheet and place it in front of your child. Explain to him or her that this review paper is to be completed independently. Encourage your child to take a few moments to look over the questions. Ask your child if he or she understands what is expected. Give your child as much time as he or she needs to complete the Review. If you see your child having any difficulty answering a question, tell him or her to leave that question and move on to the next one. When your child has completed all of the questions, encourage him or her to look over the work to look for any errors that may have been made. Mark the review paper with your child.

As you mark child's work you will see which concepts or skills your child still has difficulty mastering and that need more practice. Make sure your child reviews these skills and concepts before he or she begins the next lessons in the Addition section.

## Lesson 17

# Regrouping or Trading Rules



### What You Need

- Practice Sheets
- Teaching Aids
  - Place value mat
  - Base 10 blocks
- Blank paper or chalkboard



### Warm-Up

To begin today's lesson, take out the Lesson 17 Practice Sheet and ask your child to complete the Warm-Up activity. When he or she is finished, mark the work with your child.



### Exploring the Topic

Today your child will begin to regroup or trade numbers. The mastery of this skill will help him or her add large numbers. Your child may need more than one lesson to master this concept. As you teach this lesson be sure to explain the terms **regroup** and **trade** to your child.

Ask your child to look at the diagram below.



#### Parent Script:

If you were to count the tens and ones separately you would have the numbers that you see below the diagram. If you were to count the blocks themselves you would have 34 individual blocks.

What has happened to make 2 tens + 14 into 34? (*You have regrouped or traded 10 of the 14 ones to create 1 more ten.*)

Ask your child to use the place value mat and the base 10 blocks to regroup or trade the ones into a new group of ten. When your child has finished regrouping or trading the ones for 1 ten his or her place value mat should resemble this diagram.



**Parent Script:**

So we end up with 3 tens and 4 ones or 34 as the answer.

Explain to your child when you add you cannot have more than 9 ones in the ones column, therefore you have to regroup or trade each group of 10 ones into groups of tens.

Ask your child look at the examples below and trade the ones for tens. When this is accomplished ask him or her to tell the standard form of each number.

1.   = \_\_\_\_\_ = \_\_\_\_\_  
 2 tens    12 ones = \_\_\_\_\_

2.  = \_\_\_\_\_ = \_\_\_\_\_  
 16 ones = \_\_\_\_\_

Discuss your child's answers with him or her.

Now ask your child to regroup the numbers below. This exercise can be done orally. As your child completes each example ask him or her to give you the standard form of each number. If your child is still not confident to regroup or trade the numbers, have him or her use the base 10 blocks and the place value mat to make each number.

The number 52 is the same as \_\_\_\_\_ tens and \_\_\_\_\_ ones.

The number 83 is the same as \_\_\_\_\_ tens and \_\_\_\_\_ ones.

The number 54 is the same as \_\_\_\_\_ tens and \_\_\_\_\_ ones.

6 tens and 14 ones is the same as the number \_\_\_\_\_ .

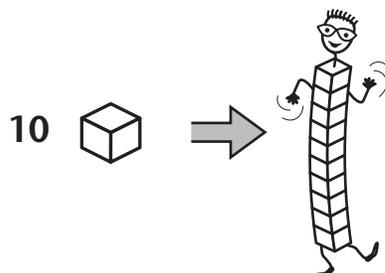
8 tens and 12 ones is the same as the number \_\_\_\_\_ .

Mark your child's work.

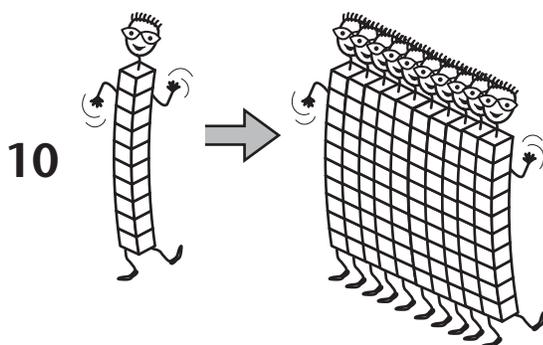
Discuss the following regrouping or trading rules with your child

## Trading Rules

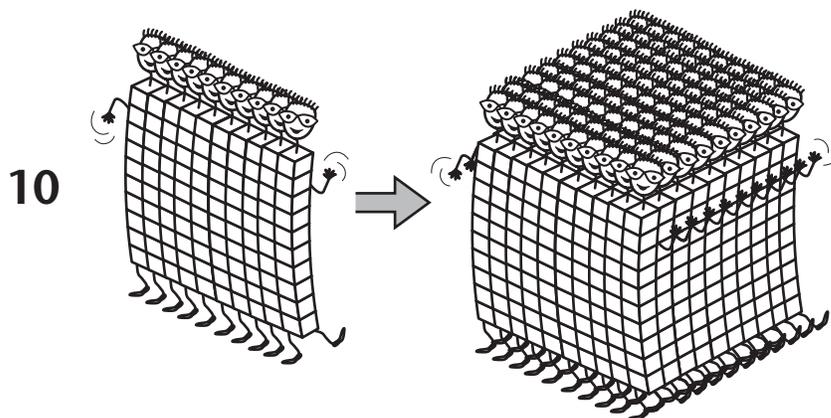
$$\begin{array}{ccc} \begin{array}{c} \blacksquare \blacksquare \blacksquare \blacksquare \blacksquare \\ \blacksquare \blacksquare \blacksquare \blacksquare \blacksquare \end{array} & = & \blacksquare \\ 10 \text{ ones} & = & 1 \text{ ten} \end{array}$$



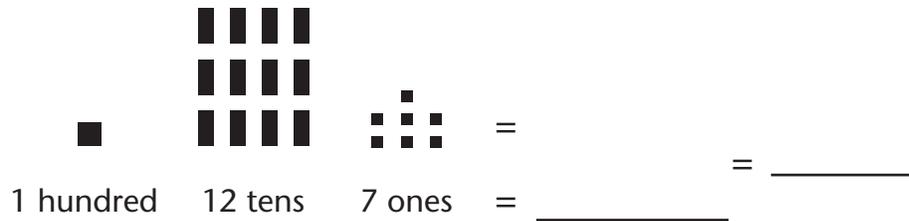
$$\begin{array}{ccc} \begin{array}{c} \blacksquare \blacksquare \blacksquare \blacksquare \blacksquare \\ \blacksquare \blacksquare \blacksquare \blacksquare \blacksquare \end{array} & = & \blacksquare \\ 10 \text{ tens} & = & 1 \text{ hundred} \end{array}$$



$$\begin{array}{ccc} \begin{array}{c} \blacksquare \blacksquare \blacksquare \blacksquare \blacksquare \\ \blacksquare \blacksquare \blacksquare \blacksquare \blacksquare \end{array} & = & \blacksquare \\ 10 \text{ hundreds} & = & 1 \text{ thousand} \end{array}$$



When you have discussed the trading rules with your child point to the following diagram.



**Parent Script:**

How many hundreds are there? (1)

How many tens are in the diagram? (12)

If you are not allowed to have more than 9 ones, do you think you are only allowed to have 9 tens also?

What do you think you would have to do?

Trade the 12 tens for 1 one hundred.

Now circle 10 of each of the tens to see if you are correct.

How many tens are left over (2 tens)

How many hundreds does 10 tens make?

(1 one hundred)

What will you do to the hundreds now?

(add the new hundred)

How many hundreds are there now? (2 hundreds)

How many tens? (2 tens)

What is the answer? (2 hundreds 2 tens and 7 ones)

If you wrote that number in standard form what would you write? (227)

Well done!

Ask your child to regroup the numbers below and then write each number in standard form. This exercise can also be completed orally. If your child is still not confident to regroup or trade the numbers as tens and hundreds, ask him or her to use the base 10 blocks and the place value mat to make each number.

**4 hundreds and 17 tens is the same as**  
\_\_\_\_\_ hundreds and \_\_\_\_\_ tens.

**7 hundreds and 12 tens is the same as**  
\_\_\_\_\_ hundreds and \_\_\_\_\_ tens

**1 hundred and 19 tens is the same as**  
\_\_\_\_\_ hundreds and \_\_\_\_\_ tens

**2 hundreds and 15 tens is the same as**  
\_\_\_\_\_ hundreds and \_\_\_\_\_ tens

Mark your child's work.

Give your child as much practice as she or he needs regrouping or trading ones into tens and tens into hundreds. It is important that your child fully understands this concept before you move on to the next lesson.



### **It's Your Turn**

Have your child look at this section on the Lesson 17 Practice Sheet. To make sure your child understands the activity directions help him or her to complete the first question. If your child still has difficulty regrouping or trading, you may need to provide more practice using the base 10 blocks. When you are satisfied your child understands the concept, ask him or her to complete the rest of the section independently.

When your child has completed this section, mark his or her work. Help your child to complete any needed corrections.



### Challenge Yourself

Ask your child to complete the **Challenge Yourself** activity.

When your child has completed this section, mark his or her work. Help your child to complete any needed corrections.

As your child works through the assignments in the Lesson 17 Practice Sheets, make a note of any difficulties he or she may encounter. Make sure that you review these concepts on a regular basis. Most children need constant review of the math concepts and skills they are taught.

## Lesson 18

# Adding 2- and 3-Digit Numbers with One Trade



### What You Need

- Practice Sheets
- Teaching Aids
  - Place value mat
  - Base 10 blocks
- Blank paper or chalkboard



### Warm-Up

Before your child completes the Warm-Up activity, give her or him time to practice the basic addition facts to 18. Follow one of the examples in Lesson 9, or choose a game from the Games section.

Take out the Lesson 18 Practice Sheet and ask your child to complete the Warm-Up activity. When he or she is finished, mark the work with your child.

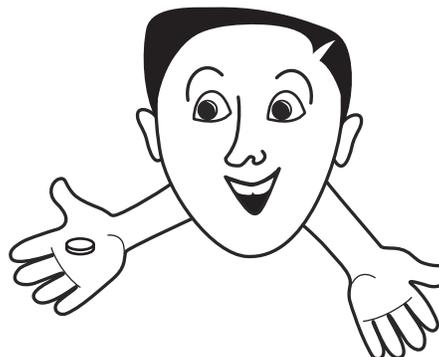


### Exploring the Topic

You want to trade  
10 pennies for a dime?



Sure ... no problem.  
"Even Steven"



**Parent Script:**

Do you remember your regrouping or trading rules? As you know when you change a large number of ones for tens and ones, it is called **regrouping** or **trading**. Trading is easier to remember as you trade the ones to make new groups of tens. There will be times when you have more than one group of ten.

Today we are going to use the trading rules to solve some addition sums.

Print the following on the chalkboard or on a sheet of paper.

$$\begin{array}{r} 15 \\ + 6 \\ \hline \end{array}$$

Ask your child to find the answer to this sum using the base 10 blocks and the place value mat.

**Parent Script:**

Put out 5 blocks, then 6 more blocks in the ones column on the mat.

Count the ones for me.

Are there more than 10 ones? (*Yes*)

How many are there? (*11*)

What do you think I will do with the 11 ones?

Can I put the 11 under the 5 + 6 in the ones column? (*No*)

What do you think I could do with this 11?

Are there any tens in the number eleven? (*Yes*)

Show me.

Can you tell me how many tens and ones there are now?  
(*1 ten and 1 one*)

Now what do you think you will do with the 1 ten?

You have to **carry it** (the one ten) over to the tens column. You do this by putting a small number on the top of the tens column to remind you to add in the new ten. The last thing you do is "add" up all the tens. Your sum will look like this.

$$\begin{array}{r} 1 \\ 15 \\ + 6 \\ \hline 21 \end{array}$$

Now ask your child to put 17 ones on the mat.

**Parent Script:**

Can you trade or regroup any of these ones for a ten?

How many tens do you have? (*1 ten*)

How many ones left over? (*7*)

Now regroup or trade 10 of the ones for one ten.

How many tens and ones do you have? (*1 ten 7 ones*)

Print the following equation on the chalkboard or on a sheet of paper.

$$19 + 66 =$$

**Parent Script:**

Let's write this equation vertically so it is easier to do.

Remember to put the ones under the ones and the tens under the tens.

$$\begin{array}{r} 19 \\ + 66 \\ \hline \end{array}$$

There are two steps you must do to find the answer to this sum.

**Step 1:** Add the ones first.  $6 + 9 = 15$

Write the 5 under the ones.

What will you do with the 1?

Is it really a 1? (*No, it is 1 ten – because there is 1 ten and 5 ones in 15.*)

So we must carry this *one ten* over to the tens column.

Put the 1 (for 1 ten) on top of the tens column.

$$\begin{array}{r} 1 \\ 19 \\ + 6 \\ \hline 5 \end{array}$$

**Step 2:** Add up all the numbers in the tens column. Make sure you remember to add in the one ten you carried over.

$$\begin{array}{r} 1 \\ 19 \\ + 66 \\ \hline 85 \end{array}$$

Write the following equations on the chalkboard or on a sheet of paper.

$$79 + 93 = \quad 73 + 87 = \quad 24 + 37 =$$

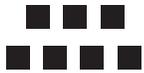
Ask your child to solve them. Give your child any necessary help. Remind your child to add the ones first if there is more than 10 in the ones column and to carry over the ten to the tens column. Your child can use the place value mat and base 10 blocks to solve these addition questions if she or he finds it helpful.

Mark your child's work.

**Parent Script:**

Let's look to see how  $345 + 449$  are added using regrouping or trading.

First we will look at them on the place value mat.

	Hundreds	Tens	Ones
			 345
+			 449
	 7 hundreds	 8 tens	 14 ones Trade in 10 ones for 1 ten.
	 7 hundreds	 9 tens	 4 ones 794

Can you see how the ones were regrouped or traded in for tens?

Now look at it written in standard form.

Trade in 10 ones  
for 1 ten.

①

Written Form	345
	+ 449
	<hr/> 794

Give your child any help she or he needs and correct the work when it is completed.

Write the following questions on the chalkboard or on a sheet of paper. Ask your child to complete the questions using the place value chart.

$$\begin{array}{r} 377 \\ + 106 \\ \hline \end{array} \qquad \begin{array}{r} 522 \\ + 229 \\ \hline \end{array}$$

$$\begin{array}{r} 578 \\ + 327 \\ \hline \end{array} \qquad \begin{array}{r} 653 \\ + 208 \\ \hline \end{array} \qquad \begin{array}{r} 149 \\ + 344 \\ \hline \end{array}$$

Mark your child's work. Give your child as much practice as she or he needs trading in ones for tens.



### It's Your Turn

Have your child look at this section on the Lesson 18 Practice Sheet. To make sure your child understands the activity directions help him or her to complete the first question.

If your child has difficulty with this example, he or she may need some extra practice adding 2 or 3-digit numbers with one trade before attempting to complete this activity.

When your child has completed this section, mark his or her work. Help your child to do any needed corrections.



### Challenge Yourself

There will not be any **Challenge Yourself** activity in this lesson. Finish the lesson by playing the game *30 or Bust*. You will find the directions for this game in the Games section.

## Lesson 19

### Adding 3-Digit Numbers With Two Trades



#### What You Need

- Practice Sheets
- Teaching Aids
  - Addition flashcards
  - Place value mat
  - Base 10 blocks
- Blank paper or chalkboard



#### Warm-Up

Before your child completes the Warm-Up activity, give her or him some time to practice the basic addition facts to 18. Follow one of the examples in Lesson 9 or choose a game from the Games section.

Take out the Lesson 19 Practice Sheet and ask your child to complete the Warm-Up activity. When he or she is finished, mark the work with your child.



#### Exploring the Topic

Explain to your child that some addition questions need more than one trade. Direct your child's attention to the following diagram.

Hey Al! Will you trade me  
a loony for 10 dimes?



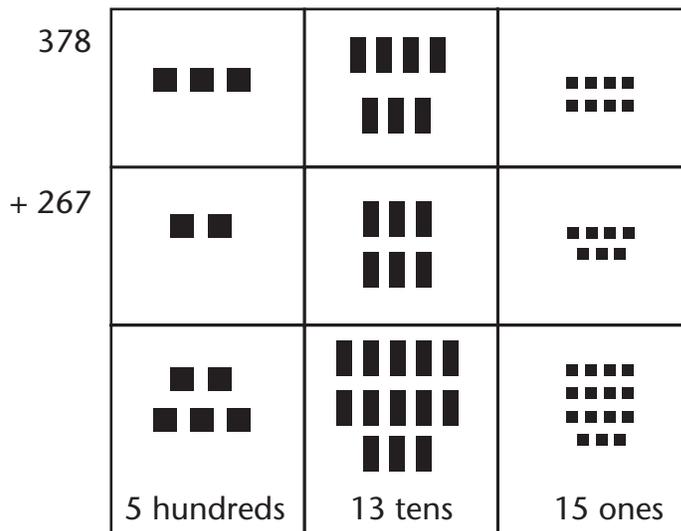
Sure, Sam  
... no problem!



Remember!  $10 \text{ ones} = 1 \text{ ten}$   
 $10 \text{ tens} = 1 \text{ hundred}$

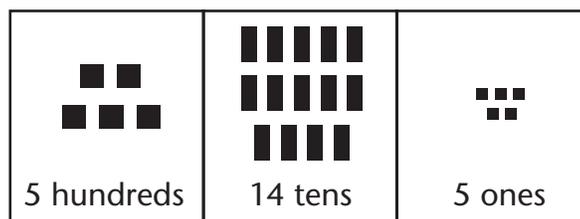
Write the following on the chalkboard or on a sheet of paper.

Example:  $378$   
 $+ 267$



10 ones

1. Trade 10 ones for 1 ten.



Discuss the diagram with your child. Ask your child what he or she will do with the extra ones and tens.

Show your child the three steps he or she must use to solve this equation.

**Step 1:** Add the ones  $8 + 7 = 15$

Write 5 under the ones column and carry the 1 ten over to the tens column.

$$\begin{array}{r} 1 \\ 378 \\ +267 \\ \hline 5 \end{array}$$

**Step 2:** Add up the tens column, make sure to add in the 1 ten you carried over.  $6 + 7 + 1 = 14$  or 14 tens. Trade in the 14 tens for 1 hundred and 4 ones. Write 4 under the tens column and carry the 1 one hundred over to the hundreds column.

$$\begin{array}{r} 1 \\ 378 \\ +267 \\ \hline 5 \end{array}$$

**Step 3:** Add up the hundreds column. Do not forget to add in the extra 1 hundred.

$$\begin{array}{r} 11 \\ 378 \\ +267 \\ \hline 45 \end{array}$$

The completed sum should look like this.

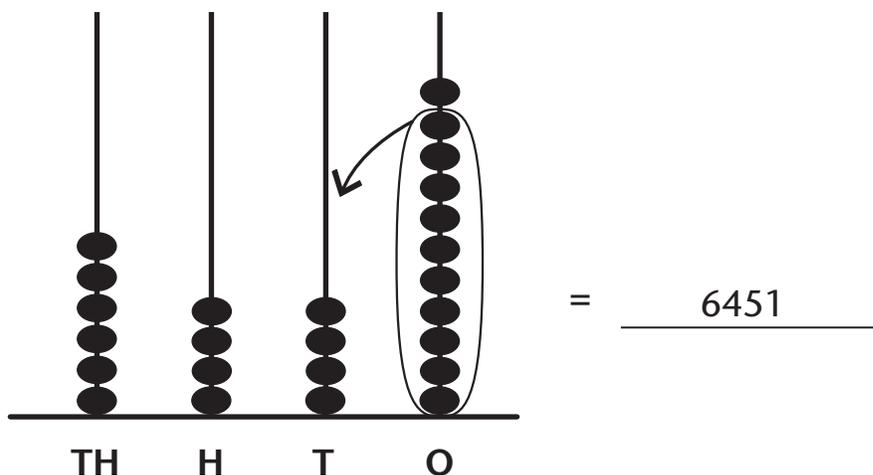
$$\begin{array}{r} 11 \\ 378 \\ +267 \\ \hline 645 \end{array}$$

Ask your child to find the answers to these questions.

$$\begin{array}{r} 456 \\ + 278 \\ \hline \end{array} \qquad \begin{array}{r} 789 \\ + 297 \\ \hline \end{array}$$

If your child has difficulty trading 10s for 100, have him or her use the base 10 blocks and the place value mat to complete each example. If your child finds it easier to use a place value chart, have him or her draw as many as needed to find the answers to the questions.

You could also show your child how an abacus can be used to picture the addition of numbers using regrouping.



### It's Your Turn

Have your child look at this section on the Lesson 19 Practice Sheet. To make sure your child understands the activity directions help him or her to complete the first question.

If your child has difficulty with this example, he or she may need some extra practice adding 2 or 3-digit numbers with two trades before attempting to complete this activity. When your child has completed this section, mark his or her work. Help your child to complete any needed corrections.



### Challenge Yourself

Now ask your child to complete the **Challenge Yourself** activity.

When your child has completed this section, mark his or her work. Help your child to complete any needed corrections.

## Lesson 20

# Adding 4-Digit Numbers With Trading



### What You Need

- Practice Sheets
- Teaching Aids
  - Place value mat
  - Base 10 blocks
- Blank paper or chalkboard



### Warm-Up

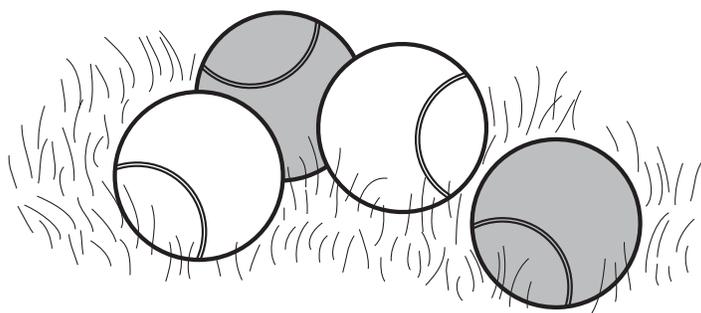
Take out the Lesson 20 Practice Sheet and ask your child to complete the Warm-Up activity. When he or she is finished, mark the work with your child.



### Exploring the Topic

In this lesson your child will practice adding 4-digit numbers that involves several trades: 10 ones for 1 ten; 10 tens for 1 hundred; and 10 hundreds for 1 thousand. If your child still has difficulty adding numbers with two trades review this concept before moving on to this lesson.

Ask your child to read the following problem with you.



At

summer tennis camp the instructors used bright yellow and orange tennis balls.

In three months 4375 yellow tennis balls and 4855 orange tennis balls were used.

How many tennis balls were used in the three months?

**Parent Script:**

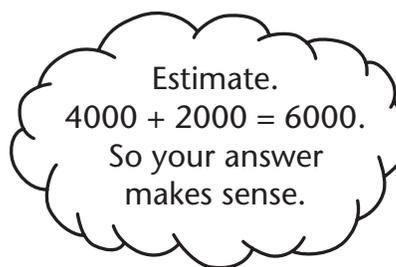
When you are trading more than one number you always trade from the smallest numbers (ones) up to the largest numbers (thousands).

Ones for 10	Tens for 100	Hundreds for 1000	Finish
$\begin{array}{r} 4855 \\ + 4375 \\ \hline \end{array}$ <p>1 ← → 10</p>	$\begin{array}{r} 4855 \\ + 4375 \\ \hline \end{array}$ <p>11 ← → 130 3 ←</p>	$\begin{array}{r} 4855 \\ + 4375 \\ \hline \end{array}$ <p>111 → 1230 2</p>	$\begin{array}{r} 111 \\ 4855 \\ + 4375 \\ \hline 9230 \end{array}$

Sometimes you may only need two trades. It is a good idea to estimate to see if your answer makes sense.

Add  $3954 + 2173$ .

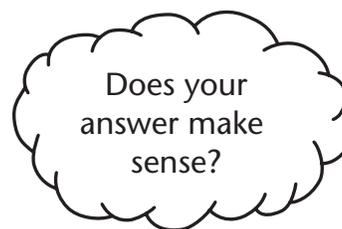
$$\begin{array}{r} 11 \\ 3954 \\ + 2173 \\ \hline 6127 \end{array}$$



There are other times when you may only have to make one trade.

Add  $5082 + 1276$ .

$$\begin{array}{r} 1 \\ 5082 \\ + 1276 \\ \hline 6358 \end{array}$$



Explain to your child that he or she will use the same steps as trading with 2 or 3-digit numbers but there will be one more step.

Review the steps for adding with trading. In the case of 4-digit numbers there could be up three trades.

Ask your child to follow the steps to solve this sum.

$$\begin{array}{r} 4958 \\ +2368 \\ \hline \end{array}$$

**Step 1:** Add the ones  $8 + 8 = 16$

Write 6 under the ones column and carry the 1 ten over to the tens column.

$$\begin{array}{r} 1 \\ 4958 \\ +2368 \\ \hline 6 \end{array}$$

**Step 2:** Add up the tens column. Be sure to add in the 1 ten you carried over.  $6 + 5 + 1 = 12$  or 12 tens. Trade in the 12 tens for 1 hundred and 2 tens. Write 2 under the tens column and carry the 1 hundred over to the hundreds column.

$$\begin{array}{r} 11 \\ 4958 \\ +2368 \\ \hline 26 \end{array}$$

**Step 3:** Add up the hundreds column. Do not forget to add in the extra 1 hundred.  $3 + 9 + 1 = 13$  or 13 hundreds. Trade in the 13 hundreds for 1 thousand and 3 hundreds. Write 3 under the hundreds column and carry the 1 thousand over to the thousands column.

$$\begin{array}{r} 111 \\ 4958 \\ +2368 \\ \hline 326 \end{array}$$

**Step 4:** Add up the thousands column.

The completed sum should look like this.

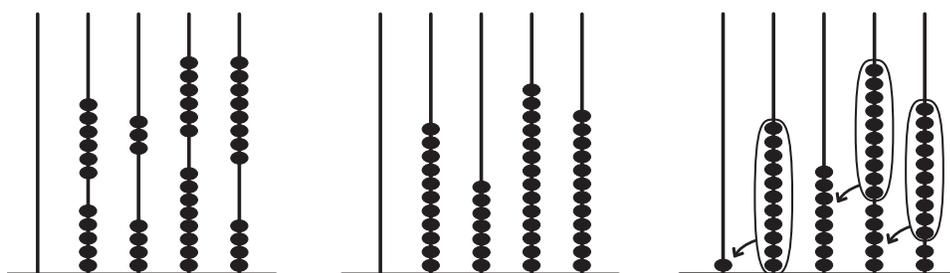
$$\begin{array}{r} 111 \\ 4958 \\ +2368 \\ \hline 7326 \end{array}$$

Ask your child to find the answers to these questions.

$$\begin{array}{r} 3456 \\ +5778 \\ \hline \end{array} \qquad \begin{array}{r} 3789 \\ +6297 \\ \hline \end{array}$$

If your child has difficulty trading 10s for 100s and 100s for 1000s have him or her use the base 10 blocks and the place value mat to complete each example. If your child finds it easier to use place value charts, have him or her draw as many as needed to find the answers to the questions. Give your child as much practice as she or he needs to master this skill.

You could also explain to your child that an abacus can again be used to picture the numbers requiring regrouping.



$$\begin{array}{r} 5484 \\ +6368 \\ \hline \end{array} = 17\ 7\ 14\ 12 = 11\ 852$$

**Parent Script:**

The following chart uses **numerals** to show exactly what you are doing when you compute answers to addition questions which require regrouping. The dark numbers show, from the left, the 1 group of 1000s, the 1 group of 10s, and the 1 group of 1s which is added on to the next place value.

	5	4	8	4
+	6	3	6	8
1		1	1	
	<b>11</b>	8	<b>15</b>	<b>12</b>
1	1	8	5	2

trading space  
(e.g. 12 ones are traded  
for 1 ten 2 ones etc.)

**It's Your Turn**

Have your child look at this section on the Lesson 20 Practice Sheet. To make sure your child understands the activity directions help him or her to complete the first question.

If your child has difficulty with this example, he or she may need some extra practice adding 4-digit numbers with several trades before attempting to complete this activity.

When your child has completed this section, mark his or her work. Help your child to do any needed corrections.

**Challenge Yourself**

Now ask your child to complete the **Challenge Yourself** activity.

When your child has completed this section, mark his or her work. Help your child to do any needed corrections.

## Lesson 21

### Review Lesson

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#### What You Need

- Practice sheets

There will not be any **Warm-Up** or **Challenge Yourself** activities in this lesson.

Today your child will complete a review of the concepts and skills covered in this section. Before your child attempts to complete the activities, review any concepts or skills he or she still has difficulty understanding. Do not give your child this review paper unless you are confident he or she can complete it successfully.



#### It's Your Turn

Take out the Lesson 21 Practice Sheet and place it in front of your child. Explain to him or her that this review is to be completed independently. Encourage your child to take a few moments to look over the questions. Ask your child if he or she understands what is expected. Give your child as much time as needed to complete the review. If you see your child having any difficulty answering a question, tell him or her to leave that question and move on to the next one. When your child has completed all of the questions, encourage him or her to look over the work to look for any errors that may have been made. Mark the work with your child. As you mark child's work, you will see which concepts or skills he or she still has difficulty mastering and needs more practice. Make sure your child reviews these skills and/or concepts before starting the lessons in the Subtraction section.



# Survive Math 5

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## Part 1 Addition

## Practice Sheets

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## Lesson 1

### Place Value to 1000

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#### Warm-Up

Fill in the missing numbers to complete each counting pattern.

1. \_\_\_\_\_, \_\_\_\_\_, 37, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, 41

2. 1, \_\_\_\_\_, \_\_\_\_\_, 31, \_\_\_\_\_, \_\_\_\_\_, 61

3. 380, \_\_\_\_\_, 420, \_\_\_\_\_, \_\_\_\_\_, 480

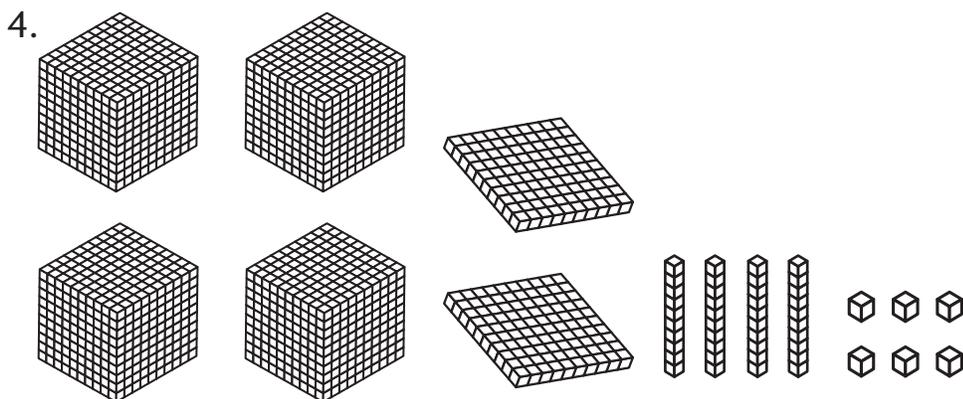
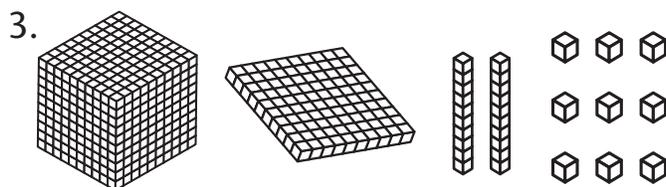
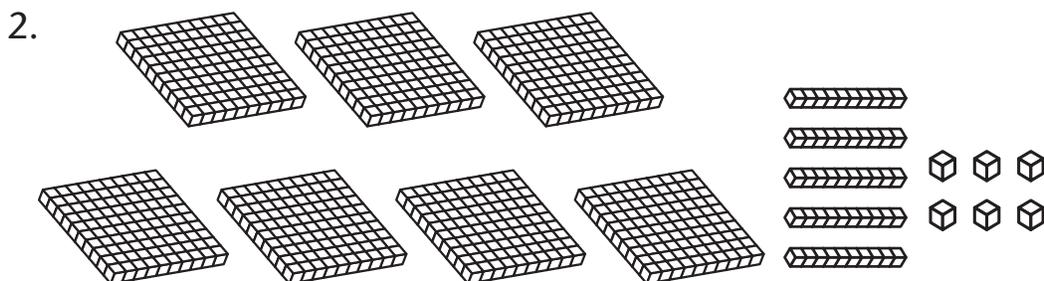
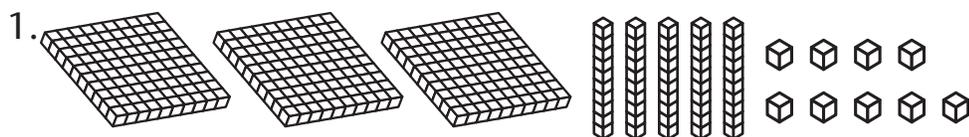
4. 222, \_\_\_\_\_, \_\_\_\_\_, 555, 666, \_\_\_\_\_, \_\_\_\_\_

5. 1000, \_\_\_\_\_, 5000, \_\_\_\_\_, 9000

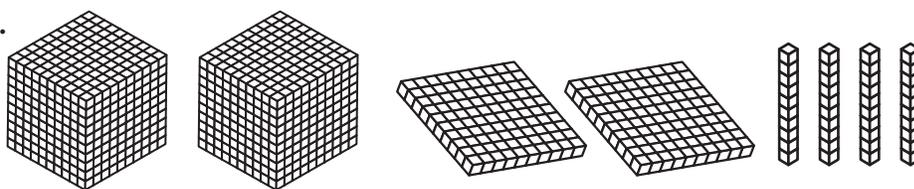


### It's Your Turn

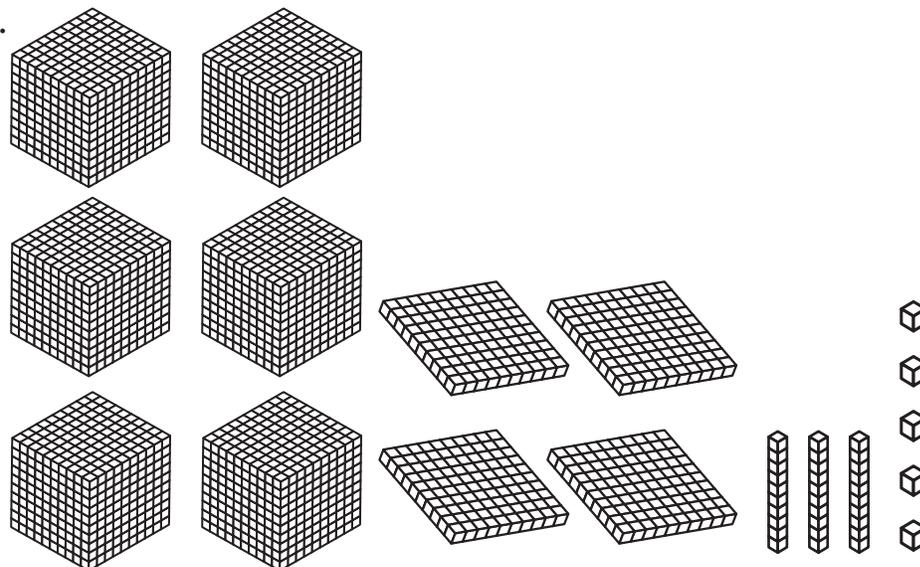
Write the number value for each set of blocks.

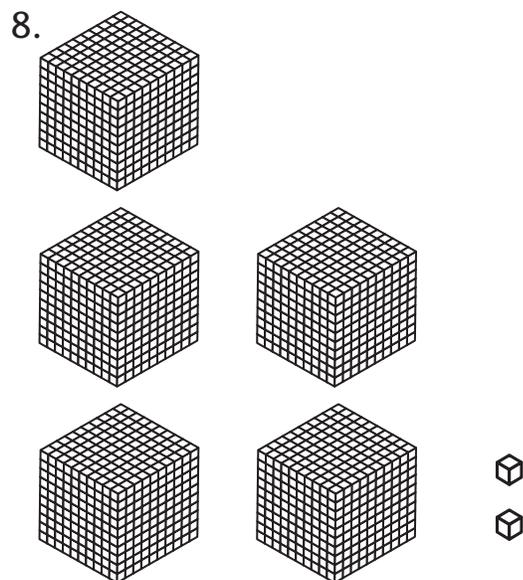
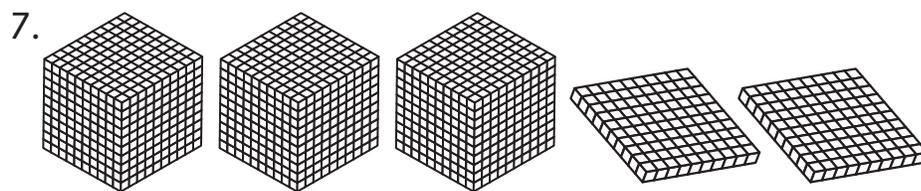


5.



6.



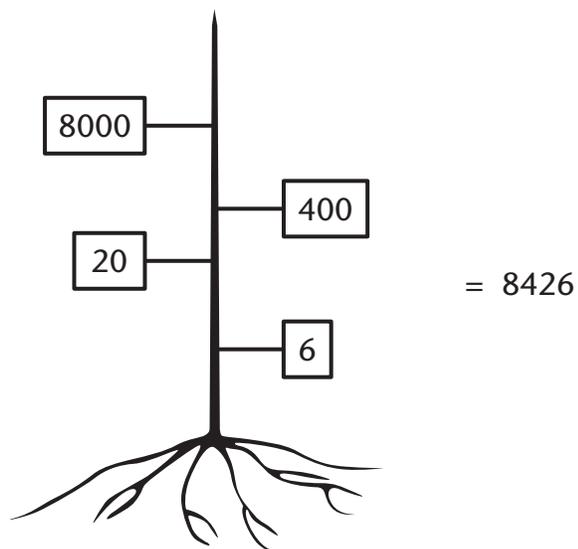




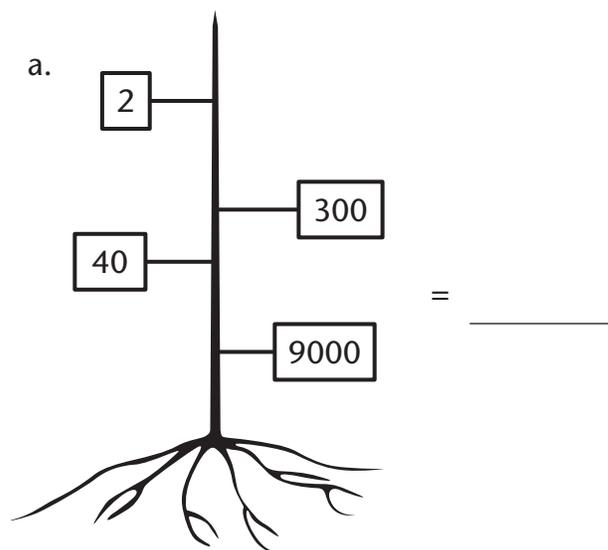
### Challenge Yourself

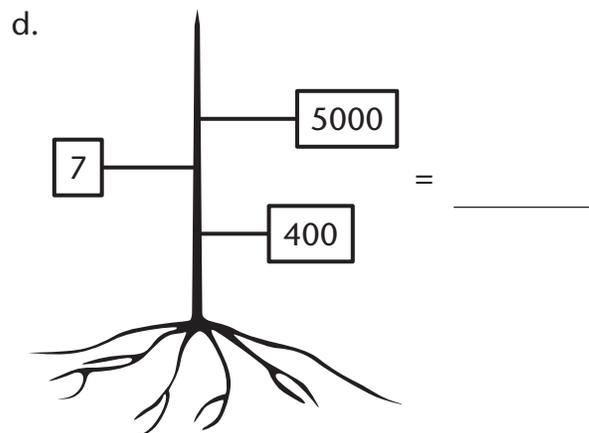
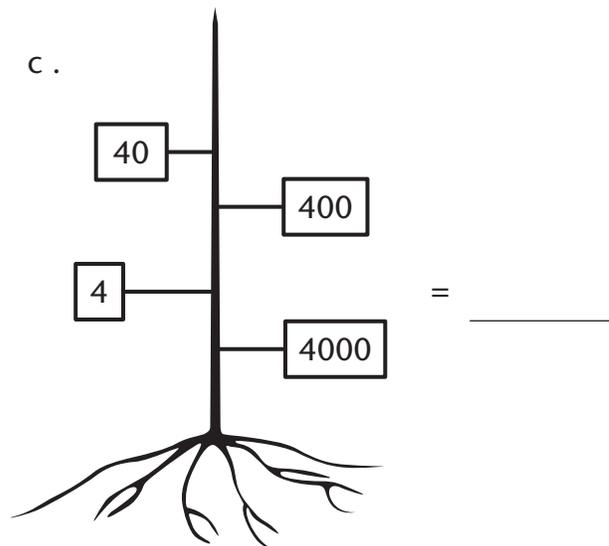
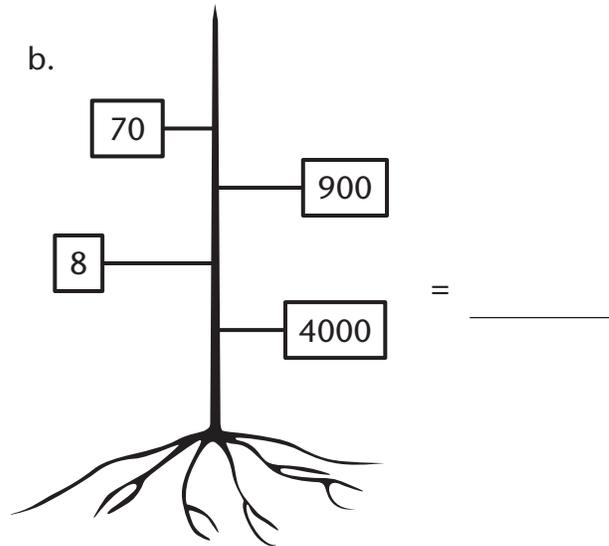
Number trees can also be used to show numbers.

**Example:**

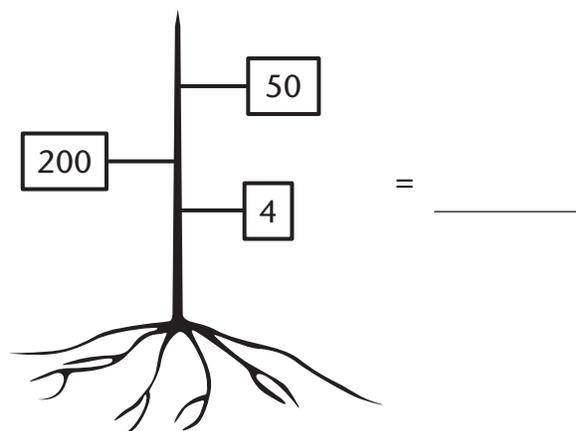


1. Unscramble the number trees and place the digits in the correct order.

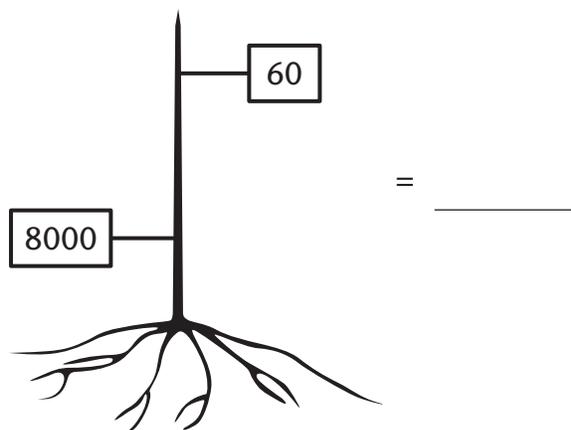




e.



f.



2. Write the value of the underlined digit in each of the following numbers.

**Example:**  $3\underline{2}04$      $2 = 200$

$2\underline{0}39$  \_\_\_\_\_

$90\underline{7}4$  \_\_\_\_\_

$1\underline{7}14$  \_\_\_\_\_



## Lesson 2

### Place Value to 10 000



#### Warm-Up

1. Take out the place value mat and base 10 blocks. Use them to show the following numbers. As you show each given number on the place value mat, ask your parent to check your work.

9350, 668, 6027, 3030

2. Fill in the missing digits. Watch the order—these questions can be tricky!

**Example:** 9210 = 2 hundreds, 0 ones, 9 thousands, 1 tens

8764 = \_\_\_\_ thousands, \_\_\_\_ hundreds, \_\_\_\_ tens, \_\_\_\_ ones

1475 = \_\_\_\_ ones, \_\_\_\_ tens, \_\_\_\_ hundreds, \_\_\_\_ thousands

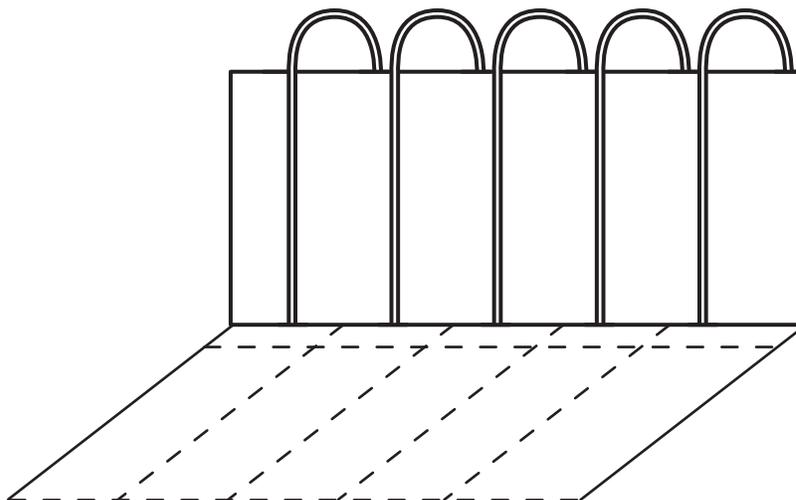
4170 = \_\_\_\_ thousands, \_\_\_\_ hundreds, \_\_\_\_ tens, \_\_\_\_ ones

5007 = \_\_\_\_ hundreds, \_\_\_\_ tens, \_\_\_\_ ones, \_\_\_\_ thousands

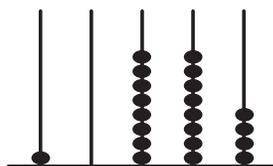


### It's Your Turn

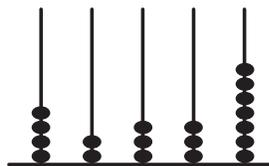
1. What place values do each of the poles on the abacus represent?  
Write your answers in the spaces below each bar.



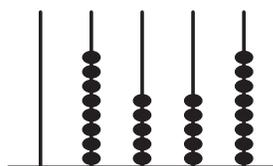
2. Write the numbers represented under each abacus.



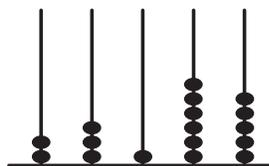
\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

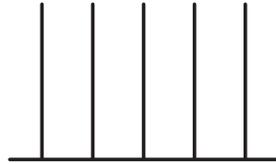


\_\_\_\_\_

3. Draw the correct number of beads on each abacus so each abacus shows the given number.

a. 45 735

b. 10 397





## Challenge Yourself

1. Complete the following patterns.

1927, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, 1931, \_\_\_\_\_, \_\_\_\_\_, 1934

\_\_\_\_\_, \_\_\_\_\_, 2500, \_\_\_\_\_, \_\_\_\_\_, 2503, \_\_\_\_\_

\_\_\_\_\_, \_\_\_\_\_, 12 000, \_\_\_\_\_, \_\_\_\_\_, 12 003

87 998, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, 88 003

2. Print the number that comes one before each given number.

\_\_\_\_\_ 3000

\_\_\_\_\_ 5 000

\_\_\_\_\_ 98 920

\_\_\_\_\_ 76 600

3. Write the number that comes after each given number.

8000 \_\_\_\_\_

7049 \_\_\_\_\_

64 799 \_\_\_\_\_

40 999 \_\_\_\_\_

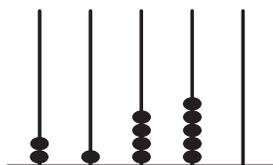
## Lesson 3

# Place Value to Hundred Thousands (Nine Hundred Ninety-Nine Thousand)

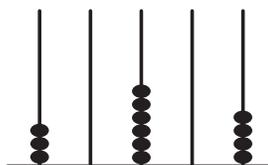


### Warm-Up

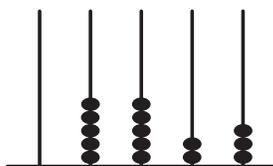
- Write the numbers that are represented by the beads on the line below each abacus.



\_\_\_\_\_



\_\_\_\_\_



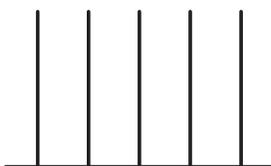
\_\_\_\_\_

- Draw beads on the abacuses to represent each number.

3106



43 095



60 521

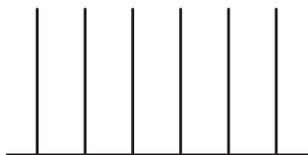




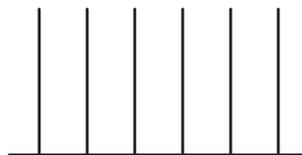
### It's Your Turn

1. Draw the correct number of beads on each abacus.

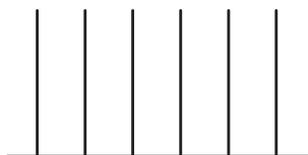
386 502



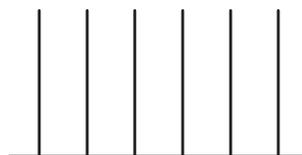
487 309



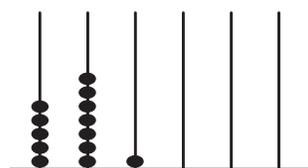
632 988



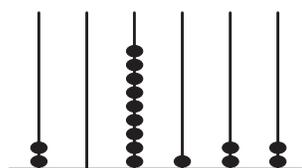
465 449



2. Write the numbers the beads represent on the lines below each abacus.



\_\_\_\_\_



\_\_\_\_\_

3. Write the place value of each **underlined** digit. Use numbers.

**Example:** 360 215          3 = 300 000

872 349 \_\_\_\_\_

981 003 \_\_\_\_\_

999 999 \_\_\_\_\_

792 115 \_\_\_\_\_

613 881 \_\_\_\_\_

99 999 \_\_\_\_\_



### Challenge Yourself

Following the instructions below, print the numbers in their correct place on the number chart. Be sure to read each direction carefully. Have fun!

	202								
									220
271									

Write all of these numbers on the chart:

1. with a 3 in the ones' place
2. with an 8 in the tens' place
3. between 259 and 265
4. greater than 291
5. 8 less than 256
6. all even numbers between 210 and 220
7. 10 more than 221
8. 1 less than 275

## Lesson 4 Counting Backward



### Warm-Up

Use the number in the box to complete the following exercise.

54 007

Write the number in standard form that is:

**Example:** one more 54 008

1. ten more \_\_\_\_\_
2. hundred more \_\_\_\_\_
3. thousand more \_\_\_\_\_
4. ten thousand more \_\_\_\_\_
5. one less \_\_\_\_\_
6. ten less \_\_\_\_\_
7. hundred less \_\_\_\_\_
8. thousand less \_\_\_\_\_
9. ten thousand less \_\_\_\_\_



### It's Your Turn

A. Count backward by **twos**. Write the numbers that come next.

1. 68 66 \_\_\_\_\_

2. 24 22 \_\_\_\_\_

3. 848 846 \_\_\_\_\_

4. 939 937 \_\_\_\_\_

B. Count backward by **fives**. Write the numbers that come next.

1. 50 45 \_\_\_\_\_

2. 465 460 \_\_\_\_\_

3. 5890 5885 \_\_\_\_\_

13 930 13 925 \_\_\_\_\_

C. Write the number that comes **one** before each number.  
(Count back.)

1. \_\_\_\_\_ 7894

2. \_\_\_\_\_ 98 920

3. \_\_\_\_\_ 818 000

4. \_\_\_\_\_ 886 740



### Challenge Yourself

Did you know that you can count back using your calculator? This is what you do.

Turn on your calculator and enter a number such as 56.

Press the minus sign (-).

Enter the number you want to count by (2s)

Press the equal sign (=).

Each time you press the equal sign, the number will go down by 2.

Count backward by 2s and write down the missing numbers.

890 888 \_\_\_\_\_

25 696 25 694 \_\_\_\_\_

Count backward by 5s and write down the missing numbers.

8700 8695 \_\_\_\_\_

359 265 359 260 \_\_\_\_\_

Count back by numbers such as 3s, 6s and so on. Have fun.



## Lesson 5

# Comparing and Ordering Numbers



### Warm-Up

1. Write the number that comes **1 before** each number.

\_\_\_\_\_ 400

\_\_\_\_\_ 43 662

\_\_\_\_\_ 340 000

2. Write the number that comes **1 after** each number given.

78 299 \_\_\_\_\_

23 899 \_\_\_\_\_

313 999 \_\_\_\_\_

3. Count backward from **600 002** to **599 990**. How many numbers did you count, not counting the number you began with? (You can use your calculator.)
4. Count forward from **879 999** to **880 016**. How many numbers did you count, not counting the number you began with?



### It's Your Turn

A. Circle the greatest (largest) number in each set of numbers.

4014                  2979                  8081                  3105                  5099

4004                  2797                  8095                  3150                  5019

4100                  2989                  8089                  3115                  5901

B. Place the signs (symbols)  $<$ , or  $>$  in the space between each pair of numbers. If you find one pair of numbers that are equal, use the  $=$  sign.

62 046 \_\_\_\_\_ 61 746                  5911 \_\_\_\_\_ 5911

70 414 \_\_\_\_\_ 71 000                  69 823 \_\_\_\_\_ 69 328

C. Order each group of numbers from least to greatest.

6175	_____	40 964	_____
4078	_____	41 694	_____
4750	_____	49 640	_____
6571	_____	40 740	_____
		71490	_____

D. Order each group of numbers from greatest to least.

4104	_____	10 500	_____
4400	_____	10 050	_____
4004	_____	10 055	_____
4014	_____	10 555	_____

64 501	_____
65 401	_____
64 510	_____
65 014	_____



### Challenge Yourself

A. Use  $>$ ,  $<$ , or  $=$  to complete each of the following number statements.

1.  $9000 + 600 + 70 + 8$  \_\_\_\_\_  $9689$

2.  $15\ 075$  \_\_\_\_\_ fifteen hundred seventy-five

3.  $60\ 000 + 4000$  \_\_\_\_\_  $60\ 040$

4.  $10\ 000 + 300 + 30$  \_\_\_\_\_  $10\ 330$

5.  $18\ 555$  \_\_\_\_\_  $10\ 000 + 500 + 50 + 5$

6.  $2150$  \_\_\_\_\_  $50 + 2000 + 100 + 4$

B. Complete each number statement below by filling in a correct number on each line.

**Example:**  $714 > 702 +$  \_\_\_\_\_ (any number less than 12)

$622 > 615 +$  \_\_\_\_\_

$7150 = 7050 +$  \_\_\_\_\_

$801 < 820 -$  \_\_\_\_\_

$72\ 000 = 70\ 000 +$  \_\_\_\_\_

$20\ 000 > 20\ 100 -$  \_\_\_\_\_

## Lesson 6

### Number Words—Expanded Notation



#### Warm-Up

Write the signs (< less than, > greater than) to complete each statement.

1. 76 846  86 999
2. 56 404  55 403
3. 104 123  119 012
4. 202 456  202 323
5. 139 484  136 408
6. 789 239  798 220
7. 683 116  639 116
8. 978 000  987 000



## It's Your Turn

### Part A

Write the words for each of the following numbers.

1. 5902 \_\_\_\_\_  
\_\_\_\_\_

2. 16 799 \_\_\_\_\_  
\_\_\_\_\_

3. 119 000 \_\_\_\_\_  
\_\_\_\_\_

4. 788 906 \_\_\_\_\_  
\_\_\_\_\_

5. 604 127 \_\_\_\_\_  
\_\_\_\_\_

### Part B

Write the following numbers in expanded form.

**Example:**  $9621 = 9000 + 600 + 20 + 1$

1. 333 \_\_\_\_\_  
\_\_\_\_\_

2. 4607 \_\_\_\_\_  
\_\_\_\_\_

3. 27 010

---

4. 185 326

---

5. 800 598

---

6. 573 209

---



## Challenge Yourself

A. Write each number in words.

**Example:** 497 = four hundred ninety-seven

1. 163 \_\_\_\_\_

2. 901 \_\_\_\_\_

3. 1478 \_\_\_\_\_

4. 23 007 \_\_\_\_\_

5. 900 111 \_\_\_\_\_

B. Write the following expanded numbers in standard form.  
Watch out—they are tricky!

1. 400      2      3000      30 000      100 000      20

\_\_\_\_\_

2. 40 000      60      700      400 000      1      9000

\_\_\_\_\_

3. 6      4000      900 000      800      70      30 000

\_\_\_\_\_

C. Write the following numerals in expanded form using words.

**Example:**  $7623 = \text{seven thousand} + \text{six hundred} + \text{twenty} + \text{three}$

1. 9823 \_\_\_\_\_  
\_\_\_\_\_

2. 63 984 \_\_\_\_\_  
\_\_\_\_\_

3. 152 365 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## Lesson 7

# Rounding Numbers



### Warm-Up

1. Write the following numbers in expanded form.

a. 92 364 \_\_\_\_\_

b. 4628 \_\_\_\_\_

c. 426 548 \_\_\_\_\_

2. Write the words for these numbers.

a. 9902 \_\_\_\_\_

\_\_\_\_\_

b. 991 329 \_\_\_\_\_

\_\_\_\_\_

c. 76 485 \_\_\_\_\_

\_\_\_\_\_

3. Write these words in standard form.

a. Eight thousand forty-nine \_\_\_\_\_

b. Seventy-six thousand four hundred twelve

\_\_\_\_\_

c. Nine hundred thousand nine hundred sixty

\_\_\_\_\_



### It's Your Turn

A. Complete the table by filling in the missing numbers.

Number	Round to the nearest 10	Round to the nearest 100
637	640	600
755	_____	_____
988	_____	_____
1046	_____	_____
3713	_____	_____
10 502	_____	_____
71 111	_____	_____

B. The Wilson family wanted to estimate the kilometers traveled on their vacation. They traveled 510 km one day, 488 km the next, and 477 km on the third day.

Estimate how many kilometers each day they traveled.

\_\_\_\_\_

You rounded to the nearest \_\_\_\_\_

- C. A boy measured two pieces of string. The first piece is 24 centimetres long and the second piece is 34 centimetres long. The boy rounded the 2 measurements. His answer is 50cm. Do you think this is reasonable? Explain your answer.

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- D. Circle the most reasonable estimate.

1. The hottest recorded temperature in the world was about:

50 degrees C      5000 degrees C      50 000 degrees C

2. Sam's mother's monthly salary is about:

\$20              \$200              \$2000

3. The Smith's new van cost about:

\$310              \$3100              \$31 000



### Challenge Yourself

Try these!

1. Round these numbers to the nearest 10

6821 \_\_\_\_\_ 5379 \_\_\_\_\_ 4980 \_\_\_\_\_

2. Round these numbers to the nearest 100

4867 \_\_\_\_\_ 2222 \_\_\_\_\_ 5621 \_\_\_\_\_

3. Round these numbers to the nearest 1000

1438 \_\_\_\_\_ 7098 \_\_\_\_\_ 5867 \_\_\_\_\_

Read this table to answer the following questions.

**How many people came to the Fair?**

Day	Number who attended
Friday	3410
Saturday	4366
Sunday	3621
Monday	4900

4. Round each number to the nearest thousand. About how many people attended the Fair altogether? \_\_\_\_\_
- a. Which day had the greatest attendance? \_\_\_\_\_
- b. Which day had the nearest number to 4000 in attendance? \_\_\_\_\_
- c. If you rounded Friday's attendance to the nearest 100, about how many came to the fair? \_\_\_\_\_

## Lesson 8

### Review Lesson

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Complete these two parts as quickly as possible. Do all the work *in your head*. Write your answers on the lines provided.

#### Part A

1.  $300 + 300 + 40 =$  \_\_\_\_\_

2.  $40 + 50 + 200 =$  \_\_\_\_\_

3.  $80 + 100 + 10 =$  \_\_\_\_\_

4.  $1000 + 3000 + 100 =$  \_\_\_\_\_

5.  $20\ 000 + 4000 + 600 =$  \_\_\_\_\_

#### Part B

1.  $46 + 9 =$  \_\_\_\_\_

2.  $54 + 8 =$  \_\_\_\_\_

3.  $77 + 4 =$  \_\_\_\_\_

4.  $78 + 5 =$  \_\_\_\_\_

5.  $69 + 7 =$  \_\_\_\_\_

6.  $460 + 90 =$  \_\_\_\_\_

7.  $690 + 70 =$  \_\_\_\_\_

8.  $4000 + 50 =$  \_\_\_\_\_

9.  $10\ 000 + 200 =$  \_\_\_\_\_

10.  $11\ 000 + 4000 + 100 + 90 =$  \_\_\_\_\_

**Part C**  
Counting Backwards

Count backwards by **threes**. Write the numbers that come next.

53, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

875, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

1528, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

24 603, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Count backwards by **tens**. Write the numbers that come next.

3156, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

47 985, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

897 443, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Part D**

Use  $<$ ,  $>$ , or  $=$  to complete each of the following number statements.

1.  $652$  \_\_\_\_\_  $700$

2.  $8200$  \_\_\_\_\_  $8015$

3.  $700 + 50 + 8$  \_\_\_\_\_  $758$

4.  $10\,000 + 800 + 80 + 6$  \_\_\_\_\_  $10\,986$

**Part E**

Order this group of numbers from **least** to **greatest**.

1076	_____
1065	_____
1081	_____
1042	_____

Order this group of numbers from **greatest** to **least**.

2501	_____
2015	_____
2051	_____
2105	_____

**Part F**

Add each money amount below and then round each total to the nearest \$ 100.

1. 

\$
50

\$
50

\$
20

\$
20

\$
20

\_\_\_\_\_

2. 

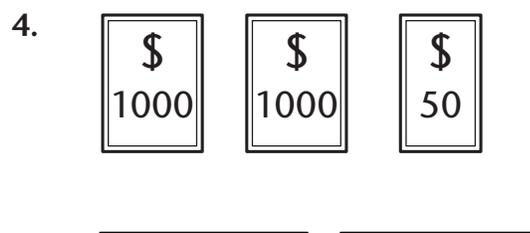
\$
100

\$
100

\$
100

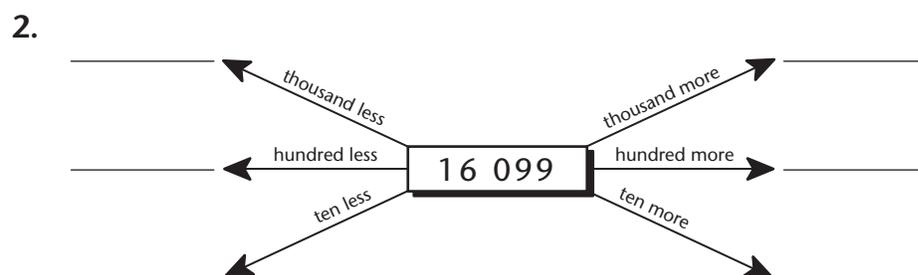
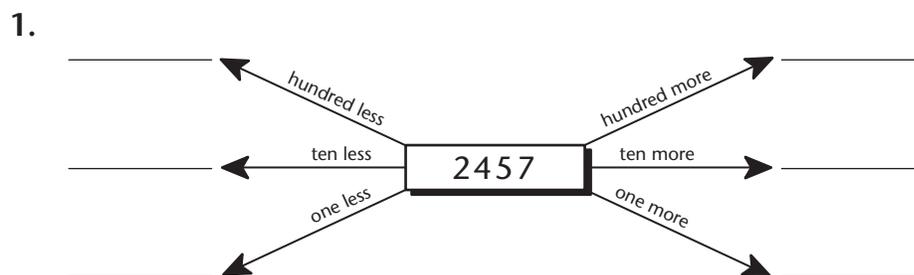
\$
20

\_\_\_\_\_

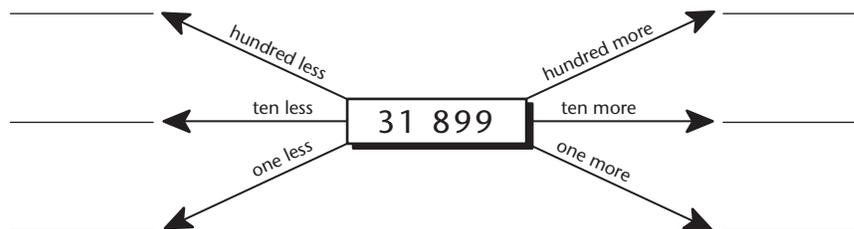


### Part G

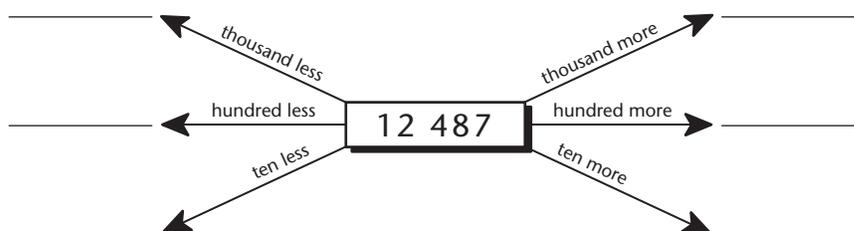
Complete each of the number charts.



3.



4.

**Part H**

Write the following words as numerals.

1. Sixty thousand four hundred seventy-five

\_\_\_\_\_

2. eight hundred thousand

\_\_\_\_\_

3. one hundred fifty- three thousand nineteen

\_\_\_\_\_

**Part I**

Write the words for these numbers.

1. 49 000

---

---

2. 493 822

---

---

3. 692 354

---

---

**Part J**

Write these numbers in expanded form.

1. 9653 \_\_\_\_\_

---

2. 21 067 \_\_\_\_\_

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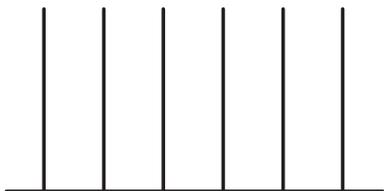
3. 206 795 \_\_\_\_\_

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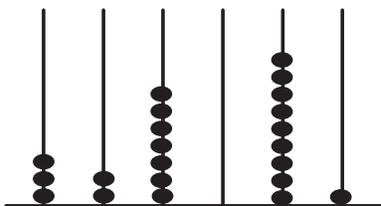
**Part K**

Draw the correct number of beads on the abacus.

534 613



Write the number the beads on the abacus shown.



\_\_\_\_\_

**Part L**

- Write the value of the underlined digits in the following numbers. Write the value in numbers rather than words.

**Example:** 876 327 10 000s

628 910 \_\_\_\_\_

342 669 \_\_\_\_\_

154 328 \_\_\_\_\_

902 381 \_\_\_\_\_

2. Compare the numbers from right to left. Circle the place in which the digits are first different in each set of numbers. Write the name of the place where the numbers differ.

**Example:** ③54 899 [circle the 3]  
⑥54 899 [circle the 6]  
in the hundred thousands' place

149 008

558 008

---

390 445

498 765

---

## Lesson 9

### Basic Addition Facts to 18

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#### It's Your Turn

Complete the following questions. See how quickly you can complete this exercise.

1.  $5 + 3 =$

14.  $7 + 4 =$

2.  $7 + 5 =$

15.  $5 + 9 =$

3.  $9 + 2 =$

16.  $7 + 8 =$

4.  $6 + 5 =$

17.  $9 + 3 =$

5.  $9 + 8 =$

18.  $6 + 6 =$

6.  $5 + 8 =$

19.  $9 + 9 =$

7.  $2 + 3 =$

20.  $7 + 7 =$

8.  $6 + 8 =$

21.  $5 + 7 =$

9.  $9 + 5 =$

22.  $9 + 4 =$

10.  $7 + 6 =$

23.  $9 + 10 =$

11.  $5 + 10 =$

24.  $6 + 7 =$

12.  $4 + 2 =$

25.  $7 + 9 =$

13.  $6 + 9 =$



## Lesson 10 Number Sense—Adding Zeroes



### Warm-Up

#### Part A

How fast can you complete Part A? Time yourself.

1.  $9 + 3 =$

6.  $8 + 8 =$

2.  $7 + 6 =$

7.  $8 + 7 =$

3.  $5 + 2 =$

8.  $7 + 9 =$

4.  $8 + 3 =$

9.  $6 + 5 =$

5.  $9 + 9 =$

10.  $9 + 0 =$

----- minutes

#### Part B

Try to better your time in this part.

1. 
$$\begin{array}{r} 4 \\ + 6 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 9 \\ + 8 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 7 \\ + 6 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 9 \\ + 7 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 8 \\ + 6 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 9 \\ + 6 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 9 \\ + 5 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} 7 \\ + 7 \\ \hline \end{array}$$

9. 
$$\begin{array}{r} 8 \\ + 0 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} 9 \\ + 2 \\ \hline \end{array}$$

----- minutes

**It's Your Turn**

Do the arithmetic in your head, then write the answers to each of the following questions. Remember to write the number answers correctly.

Remember to add the thousands,  
then the hundreds, tens, and ones.

1.  $600 + 200 + 30 =$  \_\_\_\_\_
2.  $500 + 100 + 70 + 10 =$  \_\_\_\_\_
3.  $700 + 40 + 50 =$  \_\_\_\_\_
4.  $3000 + 3000 + 300 + 300 =$  \_\_\_\_\_
5.  $4000 + 7000 + 700 + 100 =$  \_\_\_\_\_
6.  $4000 + 2000 + 700 + 200 + 40 + 30 =$  \_\_\_\_\_
7.  $340 + 500 =$  \_\_\_\_\_
8.  $6200 + 8000 =$  \_\_\_\_\_
9.  $5200 + 400 =$  \_\_\_\_\_
10.  $4000 + 2170 =$  \_\_\_\_\_

**Challenge Yourself**

Show the shortcut way of thinking and answering these questions.

**Example:**  $234 + 213 =$ 

$$\begin{array}{r} 2 + 2 = 4 \\ = 4 \end{array} \quad \begin{array}{r} 3 + 1 = 4 \\ = 4 \end{array} \quad \begin{array}{r} 4 + 3 = 7 \\ = 7 \end{array}$$

*or 447*

1.  $443 + 426 =$  \_\_\_\_\_

2.  $810 + 101 =$  \_\_\_\_\_

3.  $625 + 832 =$  \_\_\_\_\_

4.  $4639 + 2210 =$  \_\_\_\_\_

5.  $5204 + 2705 =$  \_\_\_\_\_

6.  $649 + 8230 =$  \_\_\_\_\_

7.  $3254 + 133 =$  \_\_\_\_\_



# Lesson 11

## Number Sense—Breaking Numbers Apart



### Warm-Up

Write as many addition sums as you can about the number at the top of each box.

14	17
13	19

**It's Your Turn**

Break one number apart and then do the math in your head. Write the answer on the lines.

1.  $25 + 63 =$  \_\_\_\_\_

2.  $31 + 67 =$  \_\_\_\_\_

3.  $82 + 17 =$  \_\_\_\_\_

4.  $94 + 35 =$  \_\_\_\_\_

5.  $36 + 22 =$  \_\_\_\_\_

6.  $52 + 36 =$  \_\_\_\_\_

7.  $65 + 33 =$  \_\_\_\_\_

8.  $34 + 35 =$  \_\_\_\_\_

9.  $68 + 21 =$  \_\_\_\_\_

10.  $73 + 24 =$  \_\_\_\_\_

11.  $46 + 53 =$  \_\_\_\_\_

12.  $37 + 22 =$  \_\_\_\_\_



### Challenge Yourself

Write the number in written form that is one hundred more than each number written in standard form. Remember it is important to spell the words correctly.

**Example:** 1112    one thousand two hundred twelve

1. 604 \_\_\_\_\_

\_\_\_\_\_

2. 2021 \_\_\_\_\_

\_\_\_\_\_

3. 8000 \_\_\_\_\_

\_\_\_\_\_

4. 16 899 \_\_\_\_\_

\_\_\_\_\_

5. 38 275 \_\_\_\_\_

\_\_\_\_\_



## Lesson 12

### Friendly Numbers

---



#### Warm-Up

- Write the number that comes 1 *before* the number given.
  - \_\_\_\_\_ 100 000
  - \_\_\_\_\_ 727 300
- Write the number that comes 1 *after* the number given.
  - 887 999 \_\_\_\_\_
  - 809 999 \_\_\_\_\_
- Fill in the missing numbers.
  - 1990, \_\_\_\_\_, 2010, 2120, \_\_\_\_\_
  - \_\_\_\_\_ 880 000, 881 000, \_\_\_\_\_, 883 000
- How many 100s are there between 34 900 and 35 000?  
\_\_\_\_\_
- How many 1000s are there between 130 000 and 151 000?  
\_\_\_\_\_

6. Write these numbers in words.

a. 792 364

---

---

b. 800 207

---

---



## It's Your Turn

### Part A

Complete these friendly sums to 10.

1.  $4 + \underline{\quad\quad} = 10$

2.  $0 + \underline{\quad\quad} = 10$

3.  $9 + \underline{\quad\quad} = 10$

4.  $5 + \underline{\quad\quad} = 10$

5.  $7 + \underline{\quad\quad} = 10$

6.  $2 + \underline{\quad\quad} = 10$

### Part B

Complete these friendly sums to 100.

1.  $50 + \underline{\quad\quad} = 100$

2.  $20 + \underline{\quad\quad} = 100$

3.  $30 + \underline{\quad\quad} = 100$

4.  $10 + \underline{\quad\quad} = 100$

5.  $80 + \underline{\quad\quad} = 100$

6.  $0 + \underline{\quad\quad} = 100$

7.  $55 + \underline{\quad\quad} = 100$

8.  $35 + \underline{\quad\quad} = 100$

**Part C.**

Complete these friendly sums to 1000.

1.  $200 + \underline{\hspace{2cm}} = 1000$

2.  $100 + \underline{\hspace{2cm}} = 1000$

3.  $600 + \underline{\hspace{2cm}} = 1000$

4.  $500 + \underline{\hspace{2cm}} = 1000$

5.  $0 + \underline{\hspace{2cm}} = 1000$

6.  $1000 + \underline{\hspace{2cm}} = 1000$

7.  $455 + \underline{\hspace{2cm}} = 1000$

8.  $635 + \underline{\hspace{2cm}} = 1000$

**Challenge Yourself****Try these!**

Use arrows to link the friendly numbers, then complete the sums.

**Example:**  $5 + 27 + 5 = 10 + 27 = 37$

$$\begin{array}{c} \curvearrowright \\ 5 + 27 + 5 = 10 + 27 = 37 \end{array}$$

1.  $30 + 21 + 70 =$  \_\_\_\_\_

2.  $90 + 64 + 10 =$  \_\_\_\_\_

3.  $8 + 37 + 2 =$  \_\_\_\_\_

4.  $500 + 333 + 500 =$  \_\_\_\_\_

5.  $800 + 119 + 200 =$  \_\_\_\_\_

6.  $725 + 18 + 275 =$  \_\_\_\_\_



## Lesson 13

### Adding 2-Digit Numbers—Without Regrouping or Trading

---



#### Warm-Up

1. Write five different sums for 150 using multiples of 10.

**Example:**  $120 + 30 = 150$

$140 + 10 = 150$

---

---

---

---

---

2. Write five different sums for the number 300 using multiples of 10.

---

---

---

---

---

3. Round each number to the nearest 10, then add the numbers together.



Maxine took part in a school Read-a-Thon. On the first day she read she read 47 pages and on the second day she read 32 pages. Estimate the total number of pages she read on the first two days of the Read-a-Thon.

*Remember that when rounding numbers, 1-4 round down, and 5-9 round up.*

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**It's Your Turn**

Use your base ten blocks and the place value mat or the place value chart to solve the following questions.

$$\begin{array}{r} 1. \quad 51 \\ + 17 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 6 \\ + 32 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 40 \\ + 46 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 35 \\ + 31 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 27 \\ + 70 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 60 \\ + 38 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 72 \\ + 17 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 12 \\ + 22 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 11 \\ + 80 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 43 \\ + 50 \\ \hline \end{array}$$



### Challenge Yourself Up the Ladder

Can you climb the ladder without making a mistake? Add the number at the bottom of the ladder to every number on the ladder. Write the answer in the space at the right hand-side of each ladder. The first one is done for you.

1	2	3
50	575	6
9	390	8
6	150	3
0	460	10
8	600	7
10	280	5
5	190	9
7	90	4
+ 6	+ 10	+ 8

**13**

## Lesson 14

### Adding 3-Digit Numbers—Without Regrouping or Trading

---



#### Warm-Up

- Write the following as numerals.
  - 16 tens \_\_\_\_\_
  - 23 hundreds \_\_\_\_\_
  - 69 thousands \_\_\_\_\_
  - 126 tens \_\_\_\_\_
  - 16 thousands \_\_\_\_\_
- Line up the digits and then find the answers to these questions.
  - $34 + 22 =$
  - $46 + 33 =$
  - $82 + 17 =$
  - $22 + 67 =$
  - $56 + 33 =$

**It's Your Turn**

Use your base ten blocks and place value mat or place value chart to solve the following equations.

$$\begin{array}{r} 1. \quad 143 \\ +506 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 720 \\ +148 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 344 \\ +502 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 911 \\ +27 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 501 \\ +296 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 430 \\ +211 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 620 \\ +208 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 343 \\ +222 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 110 \\ +67 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 443 \\ +505 \\ \hline \end{array}$$



### Challenge Yourself!

- A. Use your understanding of place value to continue the pattern in the addition of these numbers. The first question is done as an example.

$$63\ 290 + 3000 = 66\ 290$$

1.  $61\ 290 + 4000 =$  \_\_\_\_\_

2.  $72\ 360 + 3000 =$  \_\_\_\_\_

3.  $43\ 270 + 1000 =$  \_\_\_\_\_

4.  $51\ 101 + 2000 =$  \_\_\_\_\_

- B. Fill in the missing number.

**Example:**  $5000 + (50) + 9 = 5059$

1.  $117 = 100 +$  \_\_\_\_\_  $+ 7$

2.  $2160 = 2000 +$  \_\_\_\_\_  $+ 60$

3.  $7000 + 1000 + 7 =$  \_\_\_\_\_

4.  $6129 = 9 + 100 +$  \_\_\_\_\_  $20$

5.  $8 + 80 + 8000 +$  \_\_\_\_\_  $= 8888$



## Lesson 15

### Adding 4-Digit Numbers—Without Regrouping or Trading

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#### Warm-Up

Find the answers to these addition questions.

$$\begin{array}{r} 1. \quad 333 \\ +506 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 403 \\ +156 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 507 \\ +22 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 710 \\ +205 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 501 \\ +68 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 730 \\ +258 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 10 \\ 11 \\ +53 \\ \hline 8 \end{array}$$

$$\begin{array}{r} 8. \quad 15 \\ 22 \\ +33 \\ \hline 47 \end{array}$$

$$\begin{array}{r} 9. \quad 27 \\ 21 \\ +59 \\ \hline 6 \end{array}$$

**It's Your Turn**

Use your base 10 blocks or place value chart to solve the following equations.

**Part A**

1. 
$$\begin{array}{r} 6045 \\ +1733 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 2430 \\ +6329 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 4140 \\ +4140 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 2634 \\ +1253 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 5660 \\ +2305 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 1765 \\ +120 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 1750 \\ +33 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} 407 \\ +2002 \\ \hline \end{array}$$

**Part B**

Line up the digits and then solve the equations.

1.  $5032 + 3215 =$

2.  $1064 + 2723 =$

3.  $4100 + 3432 =$

4.  $3030 + 2109 =$

5.  $3517 + 471 =$

**Challenge Yourself—Calculator Fun**

Read this problem and then use your calculator to check Michael's addition.

Michael went on a field trip.

His mother gave him some spending money. Michael made a list of what he spent and then added it up.

Food	\$ 20. 00
T shirt	\$ 10. 00
Drinks	\$ 4. 00
Souvenir	<u>\$ 15. 00</u>
	\$ 49. 00

1. What answer did you get on the calculator? \_\_\_\_\_
2. Was Michael's total correct? \_\_\_\_\_

Look at the work below. Use your calculator to check the totals. Put a checkmark beside the answers that are correct.

3.  $9 + 7 + 8 + 3 + 6 + 5 + 7 = 47$

4.  $96 + 25 + 73 + 89 + 24 = 307$

5.  $289 + 654 = 940$

6.  $145 + 569 + 87 = 801$

7.  $2341 + 4542 = 6883$



## Lesson 16

### Review Lesson



#### Part A

Estimate the sums by rounding to the nearest 100 and then add to find the answer.

$$\begin{array}{r}
 1. \quad \$220 \longrightarrow \underline{\hspace{2cm}} \\
 \quad \quad 225 \longrightarrow \underline{\hspace{2cm}} \\
 \quad \quad +515 \longrightarrow \underline{\hspace{2cm}} \\
 \quad \quad \longrightarrow \$ \underline{\hspace{2cm}}
 \end{array}$$

$$\begin{array}{r}
 2. \quad 270 \longrightarrow \underline{\hspace{2cm}} \\
 \quad \quad 225 \longrightarrow \underline{\hspace{2cm}} \\
 \quad \quad +430 \longrightarrow \underline{\hspace{2cm}} \\
 \quad \quad \longrightarrow \underline{\hspace{2cm}}
 \end{array}$$

$$\begin{array}{r}
 3. \quad 480 \longrightarrow \underline{\hspace{2cm}} \\
 \quad \quad 580 \longrightarrow \underline{\hspace{2cm}} \\
 \quad \quad +640 \longrightarrow \underline{\hspace{2cm}} \\
 \quad \quad \longrightarrow \underline{\hspace{2cm}}
 \end{array}$$

#### Part B

Use arrows to link the friendly numbers, then complete the sums.

$$1. \quad 30 + 21 + 70 =$$

$$2. \quad 500 + 333 + 500 =$$

$$3. \quad 400 + 263 + 600 =$$

$$4. \quad 800 + 119 + 200 =$$

$$5. \quad 90 + 64 + 10 =$$

**Part C**

Solve the following equations.

1. 
$$\begin{array}{r} 545 \\ +204 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 814 \\ +184 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 906 \\ +82 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 1545 \\ +3204 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 6014 \\ +2184 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 9060 \\ +139 \\ \hline \end{array}$$

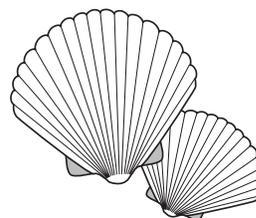
7. 
$$\begin{array}{r} 5545 \\ +2014 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} 14014 \\ +1840 \\ \hline \end{array}$$

**Part D**

Complete the word problems. Read each one carefully. Show your work in the box. Write a statement containing your answer.

1. Sean collects sea shells and rocks from the West Coast. He has 637 different shells and 2060 different rock samples. How many items does Sean have in this collection?



2. Millie's Shoe Company sold 3000 pair of hiking boots in 2000, 5000 pair in 2001, 7000 in 2002, and 9000 in 2003. How many pairs of hiking boots do you think the store will sell in 2005 if the same pattern continues? Show your pattern.





## Lesson 17

### Regrouping or Trading Rules



#### Warm-Up

Complete the addition table.

+	10	100	1000	10 000
1				
3				
5				
7				
9				



## It's Your Turn

### Part A

Regroup the ones to make more tens and then write the answer in standard form.

Example:

2	17
tens	ones

 $=$ 

3	7
tens	ones

 $=$  37

1.

7	14
tens	ones

 $=$ 

tens	ones

 $=$  \_\_\_\_\_

2.

18	19
tens	ones

 $=$ 

tens	ones

 $=$  \_\_\_\_\_

3.

3	10
tens	ones

 $=$ 

tens	ones

 $=$  \_\_\_\_\_

4.

2	11
tens	ones

 $=$ 

tens	ones

 $=$  \_\_\_\_\_

5.

0	16
tens	ones

 $=$ 

tens	ones

 $=$  \_\_\_\_\_

**Part B**

Regroup the ones to make more tens and then write the number in standard form.

**Example:**

2	14	4
H	T	O

 $=$ 

3	4	4
H	T	O

 $=$  344

1.

4	17	8
H	T	O

 $=$ 

H	T	O

 $=$  \_\_\_\_\_

2.

7	11	0
H	T	O

 $=$ 

H	T	O

 $=$  \_\_\_\_\_

3.

6	10	2
H	T	O

 $=$ 

H	T	O

 $=$  \_\_\_\_\_

4.

6	19	9
H	T	O

 $=$ 

H	T	O

 $=$  \_\_\_\_\_

5.

1	10	0
H	T	O

 $=$ 

H	T	O

 $=$  \_\_\_\_\_

**Challenge Yourself**

Write all the numbers in the table:

1. with no tens
2. with no ones
3. with 9 in the tens place
4. with 1 in the ones place
5. between 742 and 748
6. 10 greater than 775
7. 10 less than 733
8. 1 less than 770
9. with 3 in the ten's place

			704						
					716				
						787			

## Lesson 18

**Adding 2- and 3-Digit Numbers with One Trade**

---

**Warm-Up**

Line up the tens' and ones' columns, then find the answer to the questions.

1.  $62 + 24 =$

6.  $712 + 116 =$

2.  $46 + 33 =$

7.  $53 + 721 =$

3.  $18 + 71 =$

8.  $83 + 406 =$

4.  $107 + 682 =$

9.  $616 + 72 =$

5.  $444 + 205 =$

10.  $241 + 9 =$



## It's Your Turn

### Part A

Find the sums by trading 10 ones for 1 ten.

$$\begin{array}{r} 1. \quad 377 \\ +106 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 522 \\ +229 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 428 \\ +548 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 645 \\ +349 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad \$318 \\ +608 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 88 \\ +109 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad \$717 \\ +169 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 918 \\ +48 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 444 \\ +249 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad \$63 \\ +409 \\ \hline \end{array}$$

**Part B**

Line up the digits in columns, then complete the addition questions.

**Example:**

$$\begin{array}{r} 724 + 156 \longrightarrow \begin{array}{r} 1 \\ 724 \\ +156 \\ \hline 880 \end{array} \end{array}$$

1.  $149 + 339$

2.  $627 + 348$

3.  $932 + 38$

4.  $\$382 + \$109$

5.  $616 + 166$

6.  $335 + 335$

7.  $\$177 + \$805$

8.  $78 + 403$



### Challenge Yourself

Solve each word problem. Show all your work in the box.

1. Heavy rainfall lasted for two days in Prince Rupert. It rained 66 mm on the first day, 55 mm on the second day and 30 mm on the third day. How much rain fell in the three days?

2. Debbie and Frazer both collected stamps. Frazer has 923 stamps and Debbie has 680 stamps.

What would be a good estimate of the total number of stamps the two children have collected? Round to the nearest 100.

# Lesson 19

## Adding 3-Digit Numbers with Two Trades

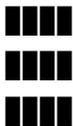


### Warm-Up

#### Part A

Complete each question by trading 10 ones for 1 ten and 10 tens for 1 hundred.

Example:

			
<u>2</u> hundreds	<u>12</u> tens	<u>15</u> ones	
<u>2</u> hundreds	<u>13</u> tens	<u>5</u> ones	Trade 1 (1s → 10s)
<u>3</u> hundreds	<u>3</u> tens	<u>5</u> ones	Trade 2 (10s → 100s)
	<u>335</u>		Standard Form

1.

			
_____ hundreds	_____ tens	_____ ones	
_____ hundreds	_____ tens	_____ ones	
_____ hundreds	_____ tens	_____ ones	
	_____		Standard Form

2.

			
_____ hundreds	_____ tens	_____ ones	
_____ hundreds	_____ tens	_____ ones	
_____ hundreds	_____ tens	_____ ones	
	_____		Standard Form

3.



\_\_\_\_\_ hundreds    \_\_\_\_\_ tens    \_\_\_\_\_ ones

\_\_\_\_\_ hundreds    \_\_\_\_\_ tens    \_\_\_\_\_ ones

\_\_\_\_\_ hundreds    \_\_\_\_\_ tens    \_\_\_\_\_ ones

\_\_\_\_\_ Standard Form

4.



\_\_\_\_\_ hundreds    \_\_\_\_\_ tens    \_\_\_\_\_ ones

\_\_\_\_\_ hundreds    \_\_\_\_\_ tens    \_\_\_\_\_ ones

\_\_\_\_\_ hundreds    \_\_\_\_\_ tens    \_\_\_\_\_ ones

\_\_\_\_\_ Standard Form

**Part B**

Line up the digits in columns, then complete the questions. Watch out for the dollar signs.

**Example:**

$$\begin{array}{r} 724 + 156 \longrightarrow \begin{array}{r} 1 \\ 724 \\ +156 \\ \hline 880 \end{array} \end{array}$$

1.  $149 + 339 =$

2.  $627 + 348 =$

3.  $932 + 38 =$

4.  $\$382 + \$109 =$

5.  $616 + 166 =$

6.  $335 + 335 =$

7.  $\$177 + \$805 =$

8.  $78 + 403 =$



## It's Your Turn

### Part A

Trade the 10 ones for 1 ten and the 10 tens for 1 hundred, then write the answer in standard form.

**Example:** 4 hundreds 12 tens 19 ones

4 hundreds 13 tens 9 ones

5 hundreds 3 tens 9 ones = 539

$$\begin{array}{r}
 1. \quad 7 \text{ hundreds} \qquad 14 \text{ tens} \qquad 16 \text{ ones} \\
 \quad \underline{\quad} \text{ hundreds} \qquad \underline{\quad} \text{ tens} \qquad \underline{\quad} \text{ ones} \\
 \quad \underline{\quad} \text{ hundreds} \qquad \underline{\quad} \text{ tens} \qquad \underline{\quad} \text{ ones} \qquad =
 \end{array}$$

$$\begin{array}{r}
 2. \quad 8 \text{ hundreds} \qquad 11 \text{ tens} \qquad 10 \text{ ones} \\
 \quad \underline{\quad} \text{ hundreds} \qquad \underline{\quad} \text{ tens} \qquad \underline{\quad} \text{ ones} \\
 \quad \underline{\quad} \text{ hundreds} \qquad \underline{\quad} \text{ tens} \qquad \underline{\quad} \text{ ones} \qquad =
 \end{array}$$

$$\begin{array}{r}
 3. \quad 6 \text{ hundreds} \qquad 10 \text{ tens} \qquad 17 \text{ ones} \\
 \quad \underline{\quad} \text{ hundreds} \qquad \underline{\quad} \text{ tens} \qquad \underline{\quad} \text{ ones} \\
 \quad \underline{\quad} \text{ hundreds} \qquad \underline{\quad} \text{ tens} \qquad \underline{\quad} \text{ ones} \qquad =
 \end{array}$$

### Part B

Line up the digits in columns and then use one or two trades to find the answers.

$$1. \quad 675 + 245 =$$

$$2. \quad 487 + 365 =$$

$$3. \quad 296 + 466 =$$

$$4. \quad 539 + 174 =$$

**Part C**

Line up the digits where required, then add to find the answers to these questions.

1.	63	2. 17	3. 412	4. 297
	75	73	59	48
	<u>+53</u>	<u>+89</u>	<u>+63</u>	<u>+414</u>

5.	212	6. 172	7. 216	8. 7316
	414	8217	42	625
	<u>+665</u>	<u>+1646</u>	<u>+1259</u>	<u>+38</u>

9.  $27 + 65 + 82$

10.  $175 + 42 + 627$

11.  $4715 + 1027 + 4433$

12.  $7465 + 212 + 1008$



## Lesson 20

### Adding 4-Digit Numbers With Trading



#### Warm-Up

A. Complete each question in your head.

1.  $50 + \underline{\hspace{2cm}} = 100$

11.  $75 + \underline{\hspace{2cm}} = 100$

2.  $8 + \underline{\hspace{2cm}} = 10$

12.  $900 + \underline{\hspace{2cm}} = 1000$

3.  $40 + \underline{\hspace{2cm}} = 100$

13.  $25 + \underline{\hspace{2cm}} = 100$

4.  $85 + \underline{\hspace{2cm}} = 100$

14.  $800 + \underline{\hspace{2cm}} = 1000$

5.  $440 + \underline{\hspace{2cm}} = 1000$

15.  $750 + \underline{\hspace{2cm}} = 1000$

6.  $4 + \underline{\hspace{2cm}} = 10$

7.  $10 + \underline{\hspace{2cm}} = 100$

8.  $320 + \underline{\hspace{2cm}} = 1000$

9.  $125 + \underline{\hspace{2cm}} = 1000$

10.  $500 + \underline{\hspace{2cm}} = 1000$

- B. Use a calculator. Use the numbers to complete the questions below.

15 436

8640

5416

62 156

47 254

52 175

16 043

35 112

68 045

- Add all the numbers less than 10 000.
- Add all the numbers with a 5 in the thousands place.
- Add the two largest numbers.
- Add the two numbers closest to 50 000.



## It's Your Turn

### Part A

Find the answers to the questions. Make sure you show your trading.

$$\begin{array}{r} 1. \quad 6437 \\ +1583 \\ \hline \end{array} \quad \begin{array}{r} 2. \quad 5450 \\ +2450 \\ \hline \end{array} \quad \begin{array}{r} 3. \quad 8725 \\ + 637 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 4375 \\ +2675 \\ \hline \end{array} \quad \begin{array}{r} 5. \quad 6438 \\ +2276 \\ \hline \end{array} \quad \begin{array}{r} 6. \quad 1470 \\ +5980 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 4925 \\ + 75 \\ \hline \end{array} \quad \begin{array}{r} 8. \quad 1011 \\ +7999 \\ \hline \end{array} \quad \begin{array}{r} 9. \quad 4527 \\ +2486 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 5741 \\ +1839 \\ \hline \end{array}$$

**Part B**

Line up the digits vertically, then complete the questions. Show all your trading.

**Example:**

$$\begin{array}{r} 629 + 4685 \longrightarrow \\ \phantom{0}4685 \\ +\phantom{0}629 \\ \hline 5314 \end{array}$$

1.  $4628 + 3488$

2.  $2167 + 3945$

3.  $2145 + 6075$

4.  $28 + 8775$

5.  $385 + 5488$

6.  $4758 + 3357$

7.  $6245 + 3076$

8.  $4537 + 1464$

9.  $4342 + 997$

10.  $68 + 4962$



## Challenge Yourself

### Part A

Estimate the total of the numbers in the line. Circle the best estimation from the numbers in the brackets. Use your calculator to find the exact answer, then write it on the line.

1. 345            591            149            669            994  
(2200 2600 3000) \_\_\_\_\_

2. 1354            446            388            956            933  
(3600 4100 4500) \_\_\_\_\_

3. 7928            4361            1860            2341  
(12 000 16 000 20 000) \_\_\_\_\_

4. 6903            3228            4955            3091  
(18 000 20 000 21 000) \_\_\_\_\_

5. 4389            3044            2440            4902  
(15 000 17 000 18 000) \_\_\_\_\_

**Part B**

Line up the digits, then find the answers to these questions.

1.  $76542 + 9074 =$

2.  $40675 + 37807 =$

3.  $19638 + 74909 =$

## Lesson 21

### Review

---



#### Part A—Counting Backwards

Count backwards by **fours**. Write the numbers that come next.

48, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

764, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

2404, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

27 198, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Count backwards by **tens**. Write the numbers that come next.

3247, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

48 698, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

896 885, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Part B**

Order this group of numbers from **least** to **greatest**.

12 076	_____
22 065	_____
22 081	_____
21 042	_____

Order this group of numbers from **greatest** to **least**.

13 501	_____
13 015	_____
13 051	_____
13 105	_____

**Part C**

Write the following words as numerals.

1. Six hundred sixty-six thousand nine hundred seventy-five

---

---

2. Seven hundred thousand nineteen

---

---

3. Four hundred fifty-three thousand three hundred forty-four

---

---

**Part D**

Write the words for these numbers.

1. 149 000

---

---

2. 493 802

---

---

3. 602 304

---

---

**Part E**

1. How many 10s are there between 90 and 180? \_\_\_\_\_

2. How many 100s are there between 2000 and 3500?

\_\_\_\_\_

3. How many 1000s are there between 34 000 and 41 000?

\_\_\_\_\_

4. How many 10 000s are there between 90 000 and 160 000?

\_\_\_\_\_

5. Write the missing multiples of 100.



6. Write the missing multiples of 1000.



### Part F

- A. Add.

$$\begin{array}{r} 1. \quad 6392 \\ + 3290 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 3216 \\ + 1429 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 7981 \\ + 4325 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 63\,241 \\ + 5980 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 9056 \\ + 4681 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 7632 \\ + 5489 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 5982 \\ + 3487 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 6305 \\ + 14685 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 7685 \\ + 9045 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 14293 \\ + 45857 \\ \hline \end{array}$$

- B. The following is a chart of populations of Canadian cities as recorded in a 1977 atlas.

Charlottetown, P.E.I.	19 133
Guelph, Ont.	60 087
Dartmouth, N.S.	64 770
Hull, Que.	63 580
Moncton, N.B.	47 891
Prince George, B.C.	33 101

What were the total populations of the following cities? Calculate your answers in the box provided and write a statement to answer the question.

1. Dartmouth and Moncton

Statement \_\_\_\_\_

\_\_\_\_\_

2. Hull and Moncton

Statement: \_\_\_\_\_

\_\_\_\_\_

## 3. Prince George and Charlottetown

Statement: \_\_\_\_\_

\_\_\_\_\_

## 4. Guelph and Hull

Statement: \_\_\_\_\_

\_\_\_\_\_

## 5. Prince George and Guelph

Statement: \_\_\_\_\_

\_\_\_\_\_

## Games

---

Your child may enjoy playing the following commercially produced games.

- Uno
- Yahtzee
- Racko
- Wizard
- Dominoes
- Skip Bo

You can also make up your own games or try the games that follow.

### Fat Cat

Number of Players: 3 to 13. Best played by 4.



#### What You Need

- a deck of cards

#### Deal

Deal out sets of four cards of a kind, with as many sets as there are players.

For example: Sets are made of 4 Kings, 4 threes, 4 nines, etc.

Three players would use three sets (12 cards).

#### How to Play

1. Choose one player to shuffle the cards and deal four cards to each player, one at a time.
2. After a player has looked at his or her cards, she or he places one card face down, in front of the player to his or her left.
3. Each player picks up the card and adds it to her or his hand.
4. Continue to pass cards until one player has four cards of a set.
5. As soon as a player collects a set, he or she stops exchanging and puts one hand on the top of her or his head.

6. Other players are to stop play and also put their hands on their heads.
7. The last player to do this becomes the "Fat Cat", loses the game, and become the next dealer.

### Scoring

The first player to make a set	10 points
Last player "Fat Cat"	0 points
Remaining players	5 points

The first player to reach 50 points is the winner.

## Playing Card Fun

The object of this game is to form a 3-digit number from your hand that is greater than the other player's 3-digit number.



### What You Need

- a deck of cards

### How To Play

1. Remove all the face cards, tens, and aces from the deck of cards.
2. Deal out all the cards between the players.
3. Each player turns up three cards at the same time.
4. Compare the numbers.
5. The player with the greatest number takes the other player's cards.
6. Keep playing until there are no cards left in your hands.

7. The person with the most 3-digit number cards at the end of the round is the winner.

You can vary this game by comparing the 3-digit number that is less than the other player's numbers

## 30 or Bust

The object of this game is to add exactly to 30. If a player adds to a sum greater than 30, she or he tally's up the points over 30. For example, if 32 is reached, 2 points are added to the score.



### What You Need

- place value mat
- counters ( buttons, coins, toothpicks)
- chalkboard or sheet of paper
- a number cube or a die showing the numbers 1- 6

### How To Play

1. You and your child are both players.
2. Each player has four rolls of the die to make one game. You can play as many games as you wish.
3. Ask your child to print her or his name at the top of the chalkboard or on the sheet of paper.
4. Have your child place the number of counters for his or age, for example 11 counters, in the ones column on the mat.
5. Now roll the number cube or die.
6. The number that is rolled, for example 4, is added to her or his age and an equal number of counters are placed in the ones column on the mat.

7. Discuss with your child whether it is necessary to regroup or trade 10 ones for a ten. If so, ask your child to demonstrate the regrouping as required.
8. After your child has four rolls of the die, it is your turn.
9. Start with a roll of the die and print the number rolled at the top of the chalkboard or the sheet of paper.
10. Roll the die four times. Each time added to your number. Ask your child to trade 10 ones for one ten for you whenever it is required.
11. The winner is the player with the least number of tally points at the end of the game.

	8
	<u>+4</u>
	12
Anne's Tally	<u>+3</u>
<del>    </del>	15
	<u>+2</u>
	17
	<u>+4</u>
Ed's Tally	21
	<u>+4</u>
	25
	<u>+3</u>
	28
	<u>+2</u>
	38

## Addition Concentration

This game is best played by two people.

You can make a concentration game by printing addition equations on one set of flashcards and the answers on another set of flashcards. Just make sure there are not two equations with the same answer.

Mix the cards and lay them face down. Take turns turning over two cards to match equations with their answers.

You could also make concentration cards with addition equations on one set of flashcards and the addition equation plus the answers on another set of cards.

## Addition or Subtraction Card War

This game is best played by two people.

1. Take the face cards out of a deck of cards.
2. Deal the cards to each player.
3. Decide if you are going to add or subtract the cards in each deal.
4. Each player turns over one card at the same time.
5. When the two cards are down see who can add or subtract the two cards the faster.
6. Whoever says the correct answer first wins the cards.
7. At the end of the game the players count their cards and whoever has the most cards wins.

## Bank Robbery

Explain to your child that he or she is listening to a bank robbery bulletin. He or she must determine how much money has been stolen. As you read the bulletin, ask your child to write the important facts on the chalkboard or on a sheet of paper.

### Parent Script:

This is an important bulletin. A robber has just stolen 5 hundred dollar bills, 6 ten dollar bills, and 7 one dollar coins. How much did the robber get away with? (\$567)

Continue using various combinations of money, for example, \$650, \$903, \$1125, \$12 500

## Secret Word

You will need several small squares of paper. The number of squares will depend on how many numbers there are to be ordered or the secret word you choose. On each of the squares, write the numbers and letters as shown below. Be sure that the corresponding letter is printed on the reverse of the correct number.

2392	2380	2375	2297	2286	Front
G	R	E	A	T	Back

Scramble the squares. Ask your child to order from the greatest to least. When the numbers have been ordered he or she can flip each square to discover the secret word. (GREAT) You can make up your own combination of words and numbers by increasing the difficulty of the numbers to be ordered.

## **Survive Math 5**

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# **Part 1**

## **Addition**

# **Answer Key**

---



# Answer Key—Part 1

## Addition



### Lesson 1: Place Value to 1000 Practice Sheet

#### Warm-Up

- 35, 36, 37, 38, 39, 40, 41
- 1, 11, 21, 31, 41, 51, 61
- 380, 400, 420, 440, 460, 480
- 222, 333, 444, 555, 666, 777, 888
- 1000, 3000, 5000, 7000, 9000

#### It's Your Turn

- 359
- 756
- 1129
- 4246
- 2240
- 6435
- 3203
- 5002

#### Challenge Yourself

- a. 9342, b. 4978, c. 4441, d. 547, e. 254, f. 8060
- 2000, 70, 700



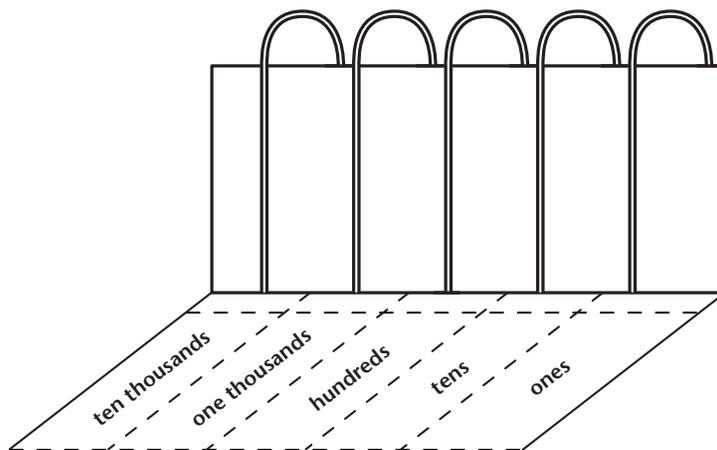
## Lesson 2: Place Value to 10 000 Practice Sheet

### Warm-Up

2.  $8764 = \underline{8}$  thousands,  $\underline{7}$  hundreds,  $\underline{6}$  tens,  $\underline{4}$  ones  
 $1475 = \underline{5}$  ones,  $\underline{7}$  tens,  $\underline{4}$  hundreds,  $\underline{1}$  thousands  
 $4170 = \underline{4}$  thousands,  $\underline{1}$  hundreds,  $\underline{7}$  tens,  $\underline{0}$  ones  
 $5007 = \underline{0}$  hundreds,  $\underline{0}$  tens,  $\underline{7}$  ones,  $\underline{5}$  thousands

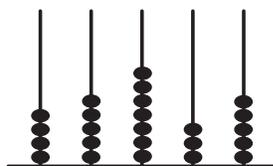
### It's Your Turn

1.

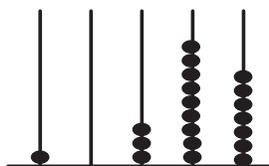


2.  $10\ 884$ ,  $42\ 337$   
 $8558$ ,  $23\ 165$

3.



45 735



10 397

### Challenge Yourself

1. 1927, **1928**, **1929**, **1930**, 1931, **1932**, **1933**, 1934  
**2498**, **2499**, 2500, **2501**, **2502**, 2503, **2504**  
**11 998**, **11 999**, 12 000, **12 001**, **12 002**, 12 003  
 87 998, **87 999**, **88 000**, **88 001**, **88 002**, 88 003
2. 2999, 14 999  
 98 919, 76 59976
3. 8001, 7050  
 64 800, 41 000

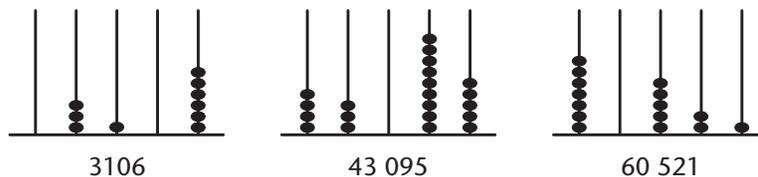


### Lesson 3: Place Value to Hundred Thousands (Nine Hundred Ninety-Nine Thousand) Practice Sheet

#### Warm-Up

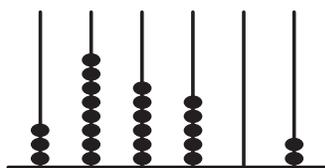
1. 21 450, 30 604, 5523

2.

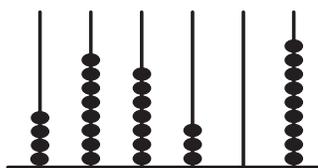


### It's Your Turn

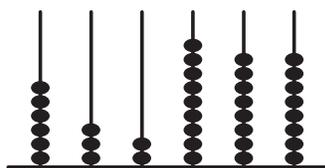
1.



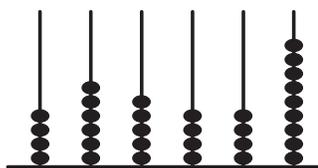
386 502



487 309



632 988



465 449

2. 571 000, 209 122

3. 9

80 000

900 000

100

3000

900

### Challenge Yourself

	202	203							
	212	213	214		216		218		220
		223							
231		233							
		243	244				248		
		253							260
261	262	263	264						
271		273	274						280
281	282	283	284	285	286	287	288	289	
	292	293	294	295	296	297	298	299	300



## Lesson 4: Counting Backward Practice Sheet

### Warm Up

- |    |                   |        |
|----|-------------------|--------|
| 1. | ten more          | 54 017 |
| 2. | hundred more      | 54 107 |
| 3. | thousand more     | 55 007 |
| 4. | ten thousand more | 64 007 |
| 5. | one less          | 54 006 |
| 6. | ten less          | 53 997 |
| 7. | hundred less      | 53 907 |
| 8. | thousand less     | 53 007 |
| 9. | ten thousand less | 44 007 |

### It's Your Turn

- A.
- 64 62 60 58
  - 20 18 16 14
  - 844 842 840 838
  - 935 933 931 929
- B.
- 40 35 30 25
  - 455 450 445 440
  - 5880 5875 5870 5865
  - 13 920 13 915 13 910 13 905
- C.
- 7893
  - 98 919
  - 817 999
  - 886 739

### Challenge Yourself

#### *Calculator Activities*

Count back by 2's

886 884 882

25 692 25 690 25 688

Count back by 5's

8690 8685 8680

359 255 359 250 359 245



## Lesson 5: Comparing and Ordering Numbers Practice Sheet

### Warm Up

1. 399  
43 661  
339 999
2. 78 300  
23 900  
314 000
3. 12 numbers
4. 17 numbers

### It's Your Turn

A. 4100 2989 8095 3150 5901

B. > =  
< >

C.	4078	40 740
	4750	40 964
	6175	41 694
	6571	71 490

D.	4400	10 555
	4104	10 500
	4014	10 055
	4004	10 050

65 401  
65 014  
64 510  
64 501

### Challenge Yourself

- |    |      |      |
|----|------|------|
| A. | 1. < | 2. = |
|    | 3. > | 4. = |
|    | 5. > | 6. < |

- B.
1.  $622 > 615 + \text{any number less than } 7$
  2.  $7150 = 7050 + \underline{100}$
  3.  $801 < 820 - \text{any number less than } 19$
  4.  $72\,000 = 70\,000 + \underline{2000}$
  5.  $20\,000 > 20\,100 - \text{any number greater than } 100$



## Lesson 6: Number Words—Expanded Notation Practice Sheet

### Warm-Up

- |                     |                     |
|---------------------|---------------------|
| 1. $<$ less than    | 2. $<$ less than    |
| 3. $<$ less than    | 4. $>$ greater than |
| 5. $>$ greater than | 6. $>$ greater than |
| 7. $<$ less than    | 8. $<$ less than    |

### It's Your Turn

#### Part A

1. Five thousand two
2. Sixteen thousand seven hundred ninety-two
3. One hundred nineteen thousand
4. Seven hundred eighty-eight thousand nine hundred six
5. Six hundred thousand one hundred twenty-seven

#### Part B

1.  $300 + 30 + 3$
2.  $4000 + 600 + 00 + 7$
3.  $20\,000 + 7000 + 000 + 10 + 0$
4.  $100\,000 + 80\,000 + 5000 + 90 + 8$
5.  $500\,000 + 70\,000 + 3000 + 200 + 00 + 9$

### Challenge Yourself

- A.
1. One hundred sixty-three
  2. Nine hundred one
  3. One thousand four hundred seventy-eight
  4. Twenty-three thousand seven
  5. Nine hundred thousand one hundred eleven



### Challenge Yourself

1. 6820  
5340  
4990
2. 4900  
2200  
5600
3. 1400  
7000  
6000
4. 16 000
  - a. Monday
  - b. Saturday
  - c. 5000



### Lesson 8: Review lesson Practice Sheet

#### Part A

1. 640      2. 290      3. 190      4. 4100      5. 24 600

#### Part B

1. 55      2. 62      3. 81      4. 83  
5. 76      6. 550      7. 760      8. 4050  
9. 10 200      10. 15 190

#### Part C

- 53, 50, 47, 44, 41  
875, 872, 869, 866, 863  
1528, 1525, 1522, 1519, 1516  
24 603, 24 600, 24 597, 24 594, 24 591  
3156, 3146, 3136, 3126, 3116, 3106  
47 985, 47 975, 47 965, 47 955, 47 945  
897 443, 897 433, 897 423, 897 413, 897 403, 897 393

**Part D**

1. <            2. >            3. =            4. <

**Part E**

least to greatest

1042

1065

1076

1081

greatest to least

2501

2105

2051

2015

**Part F**

- |    |        |        |
|----|--------|--------|
| 1. | \$ 160 | \$200  |
| 2. | \$320  | \$300  |
| 3. | \$450  | \$500  |
| 4. | \$2050 | \$2000 |

**Part G**

2357

2557

2447

**2457**

2467

2456

2458

15 099

17 099

15 999

**16 099**

16 199

16 089

16 109

<u>31 799</u>		<u>31 999</u>
<u>31 889</u>	<b>31 899</b>	<u>31 909</u>
<u>31 898</u>		<u>31 900</u>
<u>11 487</u>		<u>13 487</u>
<u>12 387</u>	<b>12 487</b>	<u>12 587</u>
<u>12 477</u>		<u>12 497</u>

**Part H**

1. 60 475                      2. 800 000                      3. 53 017

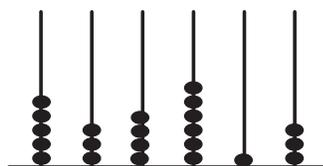
**Part I**

- Forty-nine thousand
- Four hundred ninety-two thousand eight hundred twenty-two
- Six hundred ninety-two thousand three hundred fifty-four

**Part J**

- $9000 + 600 + 50 + 3$
- $20\,000 + 1000 + 000 + 60 + 7$
- $200\,000 + 6000 + 700 + 90 + 5$

**Part K**



327 091

**Part L**

- 100s, 10 000s, 100 00s, 1000s
- in the hundred thousands place, 10 thousands place, and the thousands place  
in the hundred thousands place, thousands place, the hundreds place, and the tens place



## Lesson 9: Basic Addition Facts to 18 Practice Sheet

### It's Your Turn

- |        |        |
|--------|--------|
| 1. 8   | 14. 11 |
| 2. 12  | 15. 14 |
| 3. 11  | 16. 15 |
| 4. 11  | 17. 12 |
| 5. 17  | 18. 12 |
| 6. 13  | 19. 18 |
| 7. 5   | 20. 14 |
| 8. 14  | 21. 12 |
| 9. 14  | 22. 13 |
| 10. 13 | 23. 19 |
| 11. 15 | 24. 13 |
| 12. 6  | 25. 16 |
| 13. 15 |        |



## Lesson 10: Number Sense—Adding Zeroes Practice Sheet

### Warm-Up

#### Part A

- |       |       |
|-------|-------|
| 1. 12 | 6. 16 |
| 2. 13 | 7. 15 |
| 3. 7  | 8. 16 |
| 4. 11 | 9. 11 |
| 5. 18 | 10. 9 |

#### Part B

- |       |        |
|-------|--------|
| 1. 10 | 6. 15  |
| 2. 17 | 7. 14  |
| 3. 13 | 8. 14  |
| 4. 16 | 9. 8   |
| 5. 14 | 10. 11 |

### It's Your Turn

- |           |           |
|-----------|-----------|
| 1. 830    | 2. 680    |
| 3. 790    | 4. 6600   |
| 5. 11 800 | 6. 6970   |
| 7. 840    | 8. 14 200 |
| 9. 7600   | 10. 6170  |

### Challenge Yourself!

- |         |         |
|---------|---------|
| 1. 869  | 2. 911  |
| 3. 1457 | 4. 6840 |
| 5. 7909 | 6. 8879 |
| 7. 3387 |         |



## Lesson 11: Breaking Numbers Apart Practice Sheet

### Warm-Up

Answers will vary

For example: Addition sums for 14

7+7, 9+5, 8+6, 0+14, 10+2+2

### It's Your Turn

- |        |        |
|--------|--------|
| 1. 88  | 2. 98  |
| 3. 99  | 4. 79  |
| 5. 58  | 6. 87  |
| 7. 98  | 8. 69  |
| 9. 89  | 10. 97 |
| 11. 99 | 12. 59 |

### Challenge Yourself!

- Seven hundred four
- Two thousand one hundred twenty-one
- Eight thousand one hundred
- Sixteen thousand nine hundred ninety-nine
- Thirty-eight thousand three hundred seventy-five





## Lesson 13: Adding 2-Digit Numbers—Without Regrouping or Trading Practice Sheet

### Warm-Up

- Answers will vary. For example:  $90 + 60$ ,  $70 + 80$ ,  $30 + 120$
- Answers will vary. For example:  $21 + 90$ ,  $260 + 40$ ,  $200 + 100$

- |              |                |
|--------------|----------------|
| Exact Amount | Rounded Amount |
| 49           | 50             |
| <u>+32</u>   | <u>+30</u>     |
|              | 80 pages       |

*80 is the estimated sum*

### It's Your Turn

- |       |       |       |       |        |
|-------|-------|-------|-------|--------|
| 1. 68 | 2. 38 | 3. 86 | 4. 66 | 5. 77  |
| 6. 98 | 7. 89 | 8. 34 | 9. 91 | 10. 93 |

### Challenge Yourself!

The answers are from the top of the ladder to the bottom

Ladder 1	Ladder 2	Ladder 3
56	585	14
15	400	16
12	160	11
6	470	18
14	610	15
16	290	13
11	200	17
13	100	12



## Lesson 14: Adding Three Digit Numbers—Without Regrouping or Trading Practice Sheet

### Warm-Up

- |         |           |           |
|---------|-----------|-----------|
| a. 160  | b. 2300   | c. 69 000 |
| d. 1260 | e. 16 000 |           |
- |       |       |       |
|-------|-------|-------|
| a. 56 | b. 79 | c. 99 |
| d. 89 | e. 89 |       |

**It's Your Turn**

- |         |        |        |
|---------|--------|--------|
| 1. 649  | 2. 868 | 3. 846 |
| 4. 938  | 5. 797 | 6. 641 |
| 7. 828  | 8. 565 | 9. 177 |
| 10. 948 |        |        |

**Challenge Yourself!****Part A**

- |           |                      |           |
|-----------|----------------------|-----------|
| 1. 65 290 | 2. 275 360           | 3. 44 270 |
| 4. 53 101 | 5. Answers will vary |           |

**Part B**

- |         |        |         |
|---------|--------|---------|
| 1. 17   | 2. 100 | 3. 8007 |
| 4. 6000 | 5. 800 |         |



## **Lesson 15: Adding 4-Digit Numbers—Without Regrouping or Trading Practice Sheet**

**Warm-Up**

- |        |        |        |        |
|--------|--------|--------|--------|
| 1. 839 | 2. 559 | 3. 529 | 4. 915 |
| 5. 569 | 6. 988 |        |        |

- |          |        |        |
|----------|--------|--------|
| 2. a. 82 | b. 117 | c. 113 |
|----------|--------|--------|

**It's Your Turn****Part A**

- |         |         |         |         |
|---------|---------|---------|---------|
| 1. 7778 | 2. 8759 | 3. 8280 | 4. 3887 |
| 5. 7968 | 6. 1885 | 7. 1783 | 8. 2409 |

**Part B**

- |         |         |         |         |
|---------|---------|---------|---------|
| 1. 8247 | 2. 3787 | 3. 7532 | 4. 5139 |
| 5. 3788 |         |         |         |

**Challenge Yourself**

- |              |            |              |            |
|--------------|------------|--------------|------------|
| 1. \$40.00   | 2. Yes     | 3. Incorrect | 4. Correct |
| 5. Incorrect | 6. Correct | 7. Correct   |            |



## Lesson 16: Review Practice Sheet

### Part A

1. \$220 → \$200	2. 270 → 300	3. 480 → 500
370 → 400	225 → 200	580 → 600
+515 → <u>+500</u>	+430 → <u>+400</u>	+640 → <u>+600</u>
\$1100	900	1700

### Part B

1. 121      2. 1333      3. 12163      4. 4119  
5. 154

### Part C

1. 749      2. 998      3. 988      4. 3749  
5. 8198      6. 9199      7. 7759      8. 15 854

### Part D

1. Sean has 2697 shells in his collection.  
2. In 1993, 11 000 hiking boots will be sold.



## Lesson 17: Regrouping or Trading Rules Practice Sheet

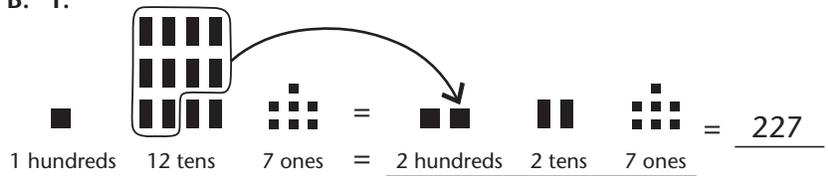
### Warm-Up

+	10	100	1000	10 000
1	11	101	1001	10 001
3	13	103	1003	10 003
5	15	105	1005	10 005
7	17	107	1007	10 007
9	19	109	1009	10 009

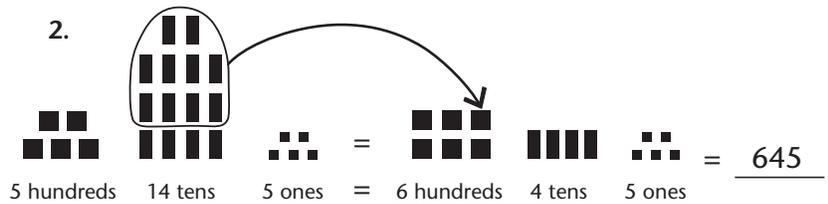
### It's Your Turn

#### Part A

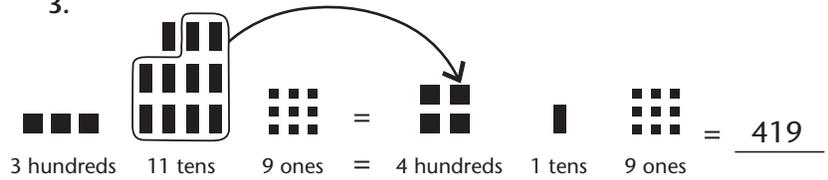
B. 1.



2.



3.



**Part B**

1. = = 

0	12	4
H	T	O

2. = = 

3	11	1
H	T	O

[insert Answer Key graphic #10  
Math 4 Mod 1 – page 367 –  
numbers 1–6]

3. = = 

1	15	6
H	T	O

4. = = 

2	10	3
H	T	O

5. = = 

5	10	0
H	T	O

6. = = 

1	13	1
H	T	O

## Challenge Yourself

701	702	703	704	705	706	707	708	709	710
711					716				720
721		723							730
731		733							740
741		743	744	745	746	747	748		750
751									760
761				765				769	770
771									780
781						787			790
791						797			800



## Lesson 18: Adding 2- and 3-Digit Numbers with One Trade Practice Sheet

### Warm-Up

- |        |        |        |        |         |
|--------|--------|--------|--------|---------|
| 1. 86  | 2. 79  | 3. 89  | 4. 789 | 5. 649  |
| 6. 828 | 7. 774 | 8. 489 | 9. 688 | 10. 250 |

### It's Your Turn

#### Part A

- |        |          |        |        |           |
|--------|----------|--------|--------|-----------|
| 1. 483 | 2. 751   | 3. 976 | 4. 994 | 5. \$926  |
| 6. 197 | 7. \$886 | 8. 988 | 9. 693 | 10. \$472 |

#### Part B

- |        |          |        |          |        |
|--------|----------|--------|----------|--------|
| 1. 488 | 2. 975   | 3. 970 | 4. \$491 | 5. 782 |
| 6. 670 | 7. \$982 | 8. 481 |          |        |

### Challenge Yourself

- 151mm
- 923 round to 900  
680 round to 700  
1600 stamps



## Lesson 19: Adding 3-Digit Numbers with Two Trades Practice Sheet

### Warm-Up

#### Part A

- |          |          |            |      |           |               |
|----------|----------|------------|------|-----------|---------------|
| <u>1</u> | hundreds | <u>12</u>  | tens | <u>18</u> | ones          |
| <u>1</u> | hundreds | <u>13</u>  | tens | <u>8</u>  | ones          |
| <u>2</u> | hundreds | <u>3</u>   | tens | <u>8</u>  | ones          |
|          |          | <u>238</u> |      |           | Standard Form |

2.

<u>8</u>	hundreds	<u>12</u>	tens	<u>12</u>	ones
<u>8</u>	hundreds	<u>13</u>	tens	<u>2</u>	ones
<u>9</u>	hundreds	<u>3</u>	tens	<u>2</u>	ones
			<u>932</u>		

Standard Form

3.

<u>4</u>	hundreds	<u>10</u>	tens	<u>12</u>	ones
<u>4</u>	hundreds	<u>11</u>	tens	<u>2</u>	ones
<u>5</u>	hundreds	<u>1</u>	tens	<u>2</u>	ones
			<u>512</u>		

Standard Form

4.

<u>1</u>	hundreds	<u>9</u>	tens	<u>10</u>	ones
<u>1</u>	hundreds	<u>10</u>	tens	<u>0</u>	ones
<u>2</u>	hundreds	<u>0</u>	tens	<u>0</u>	ones
			<u>200</u>		

Standard Form

**Part B**

- |        |        |          |          |
|--------|--------|----------|----------|
| 1. 488 | 2. 995 | 3. 970   | 4. \$491 |
| 5. 782 | 6. 670 | 7. \$882 | 8. 481   |

**It's Your Turn**

**Part A**

- |               |         |              |
|---------------|---------|--------------|
| 1. 7 hundreds | 14 tens | 16 ones      |
| 7 hundreds    | 15 tens | 6 ones       |
| 8 hundreds    | 5 tens  | 6 ones = 856 |
| 2. 8 hundreds | 11 tens | 10 ones      |
| 8 hundreds    | 12 tens | 0 ones       |
| 9 hundreds    | 2 tens  | 0 ones = 920 |
| 3. 6 hundreds | 10 tens | 17 ones      |
| 6 hundreds    | 11 tens | 7ones        |
| 7 hundreds    | 1 tens  | 7 ones = 717 |

**Part B**

1. 920      2. 852      3. 762      4. 713

**Part C**

1. 191      2. 179      3. 534      4. 759  
 5. 1291      6. 10 035      7. 1517      8. 7979

**Challenge Yourself**

<p>1.    Subtotals    147                            <u>+ 184</u>                Total        331</p>	<p>2.    Subtotals    70                            <u>+ 95</u>                Total        165</p>
---	---

<p>3.    Subtotals    145                            <u>+ 95</u>                            1018</p>	<p>4.    Subtotals    1408                            <u>+ 123</u>                            1528</p>
--	--

<p>5.    Subtotals    354                            <u>+ 1389</u>                Total        1743</p>	<p>6.    Subtotals    354                            <u>+ 6515</u>                Total        18408</p>
---	--

**Lesson 20: Adding 4-Digit Numbers With Trading Practice Sheet**

**Warm –Up**

- A.    1. 50      2. 2      3. 60      4. 15      5. 560  
       6. 6      7. 90      8. 680      9. 875      10. 500  
       11. 25      12. 100      13. 75      14. 200      15. 250

- B.    a. 14 056      b. 56 464      c. 130 201      d. 100 429

## It's Your Turn

## Part A

$$\begin{array}{r} 1. \quad \begin{array}{r} 111 \\ 6437 \\ +1583 \\ \hline 8020 \end{array} \end{array}$$

$$\begin{array}{r} 2. \quad \begin{array}{r} 1 \\ 5450 \\ +2450 \\ \hline 7900 \end{array} \end{array}$$

$$\begin{array}{r} 3. \quad \begin{array}{r} 11 \\ 8725 \\ +637 \\ \hline 9362 \end{array} \end{array}$$

$$\begin{array}{r} 4. \quad \begin{array}{r} 111 \\ 4375 \\ +2675 \\ \hline 7050 \end{array} \end{array}$$

$$\begin{array}{r} 5. \quad \begin{array}{r} 11 \\ 6438 \\ +2276 \\ \hline 8714 \end{array} \end{array}$$

$$\begin{array}{r} 6. \quad \begin{array}{r} 11 \\ 1470 \\ +5980 \\ \hline 7450 \end{array} \end{array}$$

$$\begin{array}{r} 7. \quad \begin{array}{r} 111 \\ 4925 \\ + 75 \\ \hline 5000 \end{array} \end{array}$$

$$\begin{array}{r} 8. \quad \begin{array}{r} 111 \\ 1011 \\ +7999 \\ \hline 9010 \end{array} \end{array}$$

$$\begin{array}{r} 9. \quad \begin{array}{r} 111 \\ 4527 \\ +2486 \\ \hline 7013 \end{array} \end{array}$$

$$\begin{array}{r} 10. \quad \begin{array}{r} 11 \\ 5741 \\ +1839 \\ \hline 7580 \end{array} \end{array}$$

## Part B

$$\begin{array}{r} 1. \quad \begin{array}{r} 111 \\ 4628 \\ +3488 \\ \hline 8116 \end{array} \end{array}$$

$$\begin{array}{r} 2. \quad \begin{array}{r} 111 \\ 2167 \\ +3945 \\ \hline 6112 \end{array} \end{array}$$

$$\begin{array}{r} 3. \quad \begin{array}{r} 11 \\ 2145 \\ +6075 \\ \hline 8220 \end{array} \end{array}$$

$$\begin{array}{r} 4. \quad \begin{array}{r} 11 \\ 28 \\ +8775 \\ \hline 8803 \end{array} \end{array}$$

$$\begin{array}{r} 5. \quad \begin{array}{r} 11 \\ 385 \\ +5488 \\ \hline 5873 \end{array} \end{array}$$

$$\begin{array}{r} 6. \quad \begin{array}{r} 111 \\ 4758 \\ +3357 \\ \hline 8115 \end{array} \end{array}$$

$$\begin{array}{r} 7. \quad \begin{array}{r} 11 \\ 6245 \\ +3076 \\ \hline 9321 \end{array} \end{array}$$

$$\begin{array}{r} 8. \quad \begin{array}{r} 111 \\ 4537 \\ +1464 \\ \hline 6001 \end{array} \end{array}$$

$$\begin{array}{r} 9. \quad \begin{array}{r} 11 \\ 4342 \\ +997 \\ \hline 5339 \end{array} \end{array}$$

$$\begin{array}{r} 10. \quad \begin{array}{r} 111 \\ 68 \\ +4962 \\ \hline 5030 \end{array} \end{array}$$

## Challenge Yourself

### Part A

- |    |        |        |
|----|--------|--------|
| 1. | 2700   | 2748   |
| 2. | 4100   | 4077   |
| 3. | 16 000 | 16 490 |
| 4. | 18 000 | 18 177 |
| 5. | 15 000 | 14 775 |

### Part B

- |           |           |           |
|-----------|-----------|-----------|
| 1. 85 616 | 2. 78 482 | 3. 94 547 |
|-----------|-----------|-----------|

## Lesson 21: Review

### Part A

48, 44, 40, 36, 32  
760, 763, 756, 752, 748  
2404, 2400, 2396, 2392  
27 198, 27 194, 27 190, 27 186

3247, 3237, 3227, 3217, 3207  
48 698, 48 688, 48 678, 48 668  
896 8585, 896 8575, 896 8565, 896 8555, 896 845, 896 835

### Part B

Least to greatest

12 076, 21 042, 22 065, 22 081

Greatest to least

13 501, 13 105, 13 051, 13 015

### Part C

- |            |            |            |
|------------|------------|------------|
| 1. 666 975 | 2. 700 019 | 3. 453 344 |
|------------|------------|------------|

**Part D**

1. One hundred forty-nine thousand
2. Four hundred ninety-three thousand eight hundred one
3. Six hundred two thousand three hundred four

**Part E**

- A
1. 9
  2. 16
  3. 7
  4. 7
  5. 3900    4000    4200
  6. 40 000    41 000    43 000

**Part F**

- A.
- |           |            |
|-----------|------------|
| 1. 9682   | 2. 4645    |
| 3. 12 306 | 4. 69 221  |
| 5. 13 737 | 6. 13 121  |
| 7. 9469   | 8. 20 990  |
| 9. 16 730 | 10. 60 150 |

- B.
- |   |   |
|---|---|
| <p>1.</p> $\begin{array}{r} 64770 \\ +47891 \\ \hline 112661 \end{array}$ | <p>2.</p> $\begin{array}{r} 63580 \\ +47891 \\ \hline 111471 \end{array}$ |
| <p>3.</p> $\begin{array}{r} 33101 \\ +19133 \\ \hline 52234 \end{array}$  | <p>4.</p> $\begin{array}{r} 60687 \\ +63580 \\ \hline 123667 \end{array}$ |
| <p>5.</p> $\begin{array}{r} 33101 \\ +60087 \\ \hline 93188 \end{array}$  |   |

## Pre-Test—Answer Key Basic Addition Facts to 18

---

### Part A

Answer the following questions as quickly as possible. This is not a timed test.

- |        |        |        |        |        |
|--------|--------|--------|--------|--------|
| 1. 16  | 2. 13  | 3. 19  | 4. 13  | 5. 12  |
| 6. 16  | 7. 18  | 8. 12  | 9. 12  | 10. 15 |
| 11. 14 | 12. 11 | 13. 15 | 14. 16 | 15. 15 |
| 16. 13 | 17. 14 | 18. 14 | 19. 5  | 20. 13 |
| 21. 17 | 22. 11 | 23. 11 | 24. 12 | 25. 8  |

### Adding Zeroes

Find the answers to these equations. Do all the work in your head.

**Example:**  $300 + 500 + 50 + 10 = 860$

- $400 + 700 + 50 = 1150$
- $80 + 200 + 10 = 290$
- $70 + 1000 + 1000 = 2070$
- $2000 + 200 + 90 = 2290$
- $13\,000 + 2000 + 600 + 70 + 10 = 15\,680$

These skills are covered in Lessons 9 and 10.

## Part B—Breaking Numbers Apart

**Example:**  $73 + 26 = ?$

$70 + 26 =$  Take the 3 away, then add

$+ 3 =$  Add the 3 back onto the number.

$70 + 29 = 99$

Break the number apart, then add. Write the answers on the lines. Show your work.

1.  $25 + 19 = 20 + 19 + 5 = 44$

2.  $83 + 16 = 80 + 16 + 3 = 99$

3.  $37 + 22 = 40 + 22 + 7 = 69$

4.  $46 + 52 = 50 + 52 + 6 = 108$

5.  $71 + 18 = 70 + 18 + 1 = 89$

## Friendly Numbers

**Example:**  $75 + 25 = 100$

$350 + 600 = 1000$

1. Write the friendly numbers to 100.

a.  $45 + 55 = 100$

b.  $80 + 20 = 100$

c.  $0 + 100 = 100$

d.  $75 + 25 = 100$

e.  $50 + 50 = 100$

2. Write the friendly numbers to 1000.

a.  $500 + 500 = 1000$

b.  $225 + 775 = 1000$

c.  $450 + 550 = 1000$

d.  $1000 + 0 = 1000$

e.  $775 + 225 = 1000$

These skills are covered in Lessons 11 and 12.

### Part C—Adding 2- and 3-digit Numbers Without Regrouping

Example: 
$$\begin{array}{r} 25 \\ +64 \\ \hline \end{array}$$

1. Line up the digits, then find the answers to these equations. Show your work.

a.  $27 + 42 = 69$

b.  $53 + 46 = 99$

c.  $72 + 34 = 106$

d.  $35 + 34 = 69$

e.  $22 + 36 + 11 = 59$

2. Find the sum.

**Example:** 
$$\begin{array}{r} 245 \\ +304 \\ \hline \end{array}$$

1. 
$$\begin{array}{r} 111 \\ +203 \\ \hline 314 \end{array}$$

2. 
$$\begin{array}{r} 461 \\ +320 \\ \hline 781 \end{array}$$

3. 
$$\begin{array}{r} 344 \\ +432 \\ \hline 776 \end{array}$$

4. 
$$\begin{array}{r} 604 \\ +71 \\ \hline 675 \end{array}$$

5. 
$$\begin{array}{r} 868 \\ +120 \\ \hline 988 \end{array}$$

3. Find the answers to the following questions.

**Example:** 
$$\begin{array}{r} 5604 \\ +2063 \\ \hline 7667 \end{array}$$

a. 
$$\begin{array}{r} 2044 \\ +3712 \\ \hline 5756 \end{array}$$

b. 
$$\begin{array}{r} 6700 \\ +1198 \\ \hline 7898 \end{array}$$

c. 
$$\begin{array}{r} 4234 \\ +5742 \\ \hline 9976 \end{array}$$

d. 
$$\begin{array}{r} 7213 \\ +765 \\ \hline 7978 \end{array}$$

e. 
$$\begin{array}{r} 3704 \\ +4165 \\ \hline 7869 \end{array}$$

These skills are covered in Lessons 13, 14 and 15.

## Part D—Adding 2- and 3-digit Numbers With Regrouping

1. Complete each question by adding 10 ones for 1 ten. Remember to show your carrying figures.

**Example:** 
$$\begin{array}{r} \phantom{0}^1 378 \\ +207 \\ \hline 585 \end{array}$$

a. 
$$\begin{array}{r} \phantom{0}^1 463 \\ +218 \\ \hline 681 \end{array}$$

b. 
$$\begin{array}{r} \phantom{0}^1 \$523 \\ +409 \\ \hline \$932 \end{array}$$

c. 
$$\begin{array}{r} \phantom{0}^1 425 \\ +269 \\ \hline 694 \end{array}$$

d. 
$$\begin{array}{r} \phantom{0}^1 555 \\ +305 \\ \hline 860 \end{array}$$

e. 
$$\begin{array}{r} \phantom{0}^1 \$672 \\ +318 \\ \hline \$990 \end{array}$$

2. Complete each question by trading 10 ones for 1 ten and 10 tens for 1 one hundred.

**Example:** 
$$\begin{array}{r} \phantom{00}^{11} 567 \\ +298 \\ \hline 867 \end{array}$$

a. 
$$\begin{array}{r} \phantom{00}^{11} 378 \\ +267 \\ \hline 645 \end{array}$$

b. 
$$\begin{array}{r} \phantom{00}^{11} 456 \\ +278 \\ \hline 734 \end{array}$$

c. 
$$\begin{array}{r} \phantom{00}^{11} 789 \\ +297 \\ \hline 1086 \end{array}$$

d. 
$$\begin{array}{r} \phantom{00}^{11} 539 \\ +173 \\ \hline 712 \end{array}$$

e. 
$$\begin{array}{r} \phantom{00}^{11} 128 \\ +195 \\ \hline 323 \end{array}$$

3. Complete each equation by trading 10 ones for 1 ten, 10 tens for 1 one hundred and 10 one hundreds for one thousand.

**Example:** 
$$\begin{array}{r} \phantom{0}111 \\ 5678 \\ +1589 \\ \hline 7267 \end{array}$$

a. 
$$\begin{array}{r} \phantom{0}111 \\ 2634 \\ +1789 \\ \hline 4423 \end{array}$$

b. 
$$\begin{array}{r} \phantom{0}111 \\ 4379 \\ +1078 \\ \hline 5457 \end{array}$$

c. 
$$\begin{array}{r} \phantom{0}111 \\ 2777 \\ +3898 \\ \hline 6675 \end{array}$$

d. 
$$\begin{array}{r} \phantom{0}111 \\ 4639 \\ +2065 \\ \hline 6704 \end{array}$$

e. 
$$\begin{array}{r} \phantom{0}111 \\ \$6780 \\ +937 \\ \hline \$7717 \end{array}$$

These skills are covered in Lessons 17, 18, 19 and 20.

## Glossary

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You will find the definitions of these words helpful as you explain this package's mathematical concepts to your child.

**addition**—the combining or joining of two or more sets or groups

**addend**—any number that is added to another number

For example, in  $4 + 5$ , both 4 and 5 are addends.

**automatic recall**—remember instantly

**die**—singular—1 die, a pair of dice

**difference**—the number left after subtracting one number from another number

**equation**—a number sentence that has the symbols  $+$ ,  $-$ ,  $=$ .

For example:  $33 + 25 = 58$

**estimation**—making a close guess

**fact family**—number sentences of related facts

For example:  $9 + 6 = 15$ ,  $6 + 9 = 15$ ,  $15 - 6 = 9$ ,  $15 - 9 = 6$

**numerals**—the symbol that stands for a number

For example: 7, 8, and 9

**regrouping**—renaming numbers using place value

For example: 46 or 4 tens and 6 ones can be regrouped 3 tens and 16 ones.

Another term for regrouping is **trading**. The terms “carrying” and “borrowing” are often used in association with regrouping or trading.

**rounding**—bringing numbers down or up to the nearest ten, hundreds, or thousands

For example: 43 to 40, 678 to 700, 9900 to 10 000

**subtraction**—taking one number from the other to find the difference

**sum**—the number that is arrived at when you add two or more numbers together





7540004661

New, April 2005