

# MATH

Student Book

► **1st Grade**

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# NUMBER ORDER, ADD/SUBTRACT MATH 101

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LIFEPAC Test | **Pull-out**



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## Learn with our friends!



When you see me, I will help your teacher explain the exciting things you are expected to do.



When you do actions with me, you will learn how to write, draw, match words, read, and much more.



You and I will learn about matching words, listening, drawing, and other fun things in your lessons.



Follow me and I will show you new, exciting truths that will help you learn and understand what you study. Let's learn!

# ADD/SUBTRACT TO 10, SHAPES



## Objectives

**Read these objectives.** They will tell what you will be able to do when you have finished this LIFE PAC®.

1. I can add and subtract sets to 10.
2. I can tell the ones' place and the tens' place.
3. I can tell greater than and less than to 99.
4. I can learn to measure objects.
5. I can learn about flat and solid shapes.
6. I can write numbers as words.
7. I can recognize patterns and tell what comes next.

**My name is**

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# 1. ADDITION FACTS TO 10



Write the number in the .

1	2	3	4	6	5	1	2	7
+ 6	+ 5	+ 3	+ 5	+ 3	+ 5	+ 3	+ 8	+ 3
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

8	5	5	5	3	6	4	8	2
+ 2	+ 0	+ 1	+ 3	+ 1	+ 4	+ 0	+ 1	+ 1
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

1	9	7	4	2	2	8	5	3
+ 8	+ 0	+ 1	+ 1	+ 2	+ 7	+ 0	+ 2	+ 6
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

4	6	1	2	2	9	5	3	7
+ 2	+ 2	+ 0	+ 4	+ 0	+ 1	+ 4	+ 0	+ 0
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

3	2	1	4	7	6	1	1	3
+ 5	+ 6	+ 1	+ 4	+ 2	+ 0	+ 9	+ 4	+ 7
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

6	4	2	4	3	3	1	1	1
+ 1	+ 3	+ 3	+ 6	+ 4	+ 2	+ 2	+ 7	+ 5
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>



## Add on the number line.



Put your finger on the 1 and ...

**count 1 more.**

$$1 + 1 = \underline{\quad ? \quad}$$

We have counted to \_\_\_\_\_ on the number line.

We can say that  $1 + 1 = \underline{\quad}$  .

**count 2 more.**

$$1 + 2 = \underline{\quad ? \quad}$$

We have counted to \_\_\_\_\_ on the number line.

We can say that  $1 + 2 = \underline{\quad}$  .

**count 3 more.**

$$1 + 3 = \underline{\quad ? \quad}$$

We have counted to \_\_\_\_\_ on the number line.

We can say that  $1 + 3 = \underline{\quad}$  .

**count 4 more.**

$$1 + 4 = \underline{\quad ? \quad}$$

We have counted to \_\_\_\_\_ on the number line.

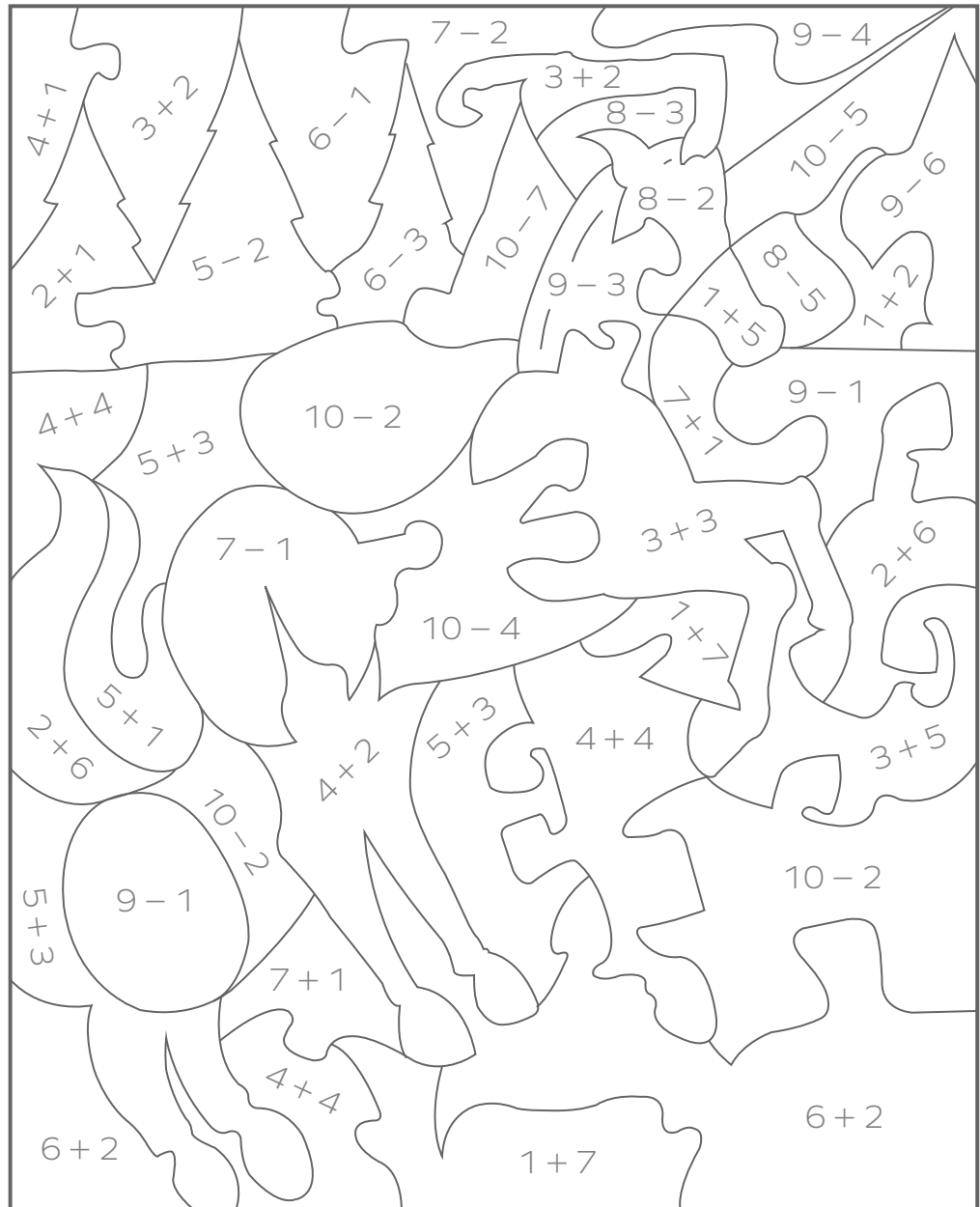
We can say that  $1 + 4 = \underline{\quad}$  .



Add and subtract. Name your picture.

Color all facts that equal ...

- 3** green.
- 5** blue.
- 6** red.
- 8** brown.



Before you take the Self Test, study what you have read and done. The Self Test will check what you remember.



Count by 5!

5, \_\_\_\_\_, 15, 20, \_\_\_\_\_, \_\_\_\_\_,  
 35, 40, \_\_\_\_\_, 50, 55, \_\_\_\_\_,  
 \_\_\_\_\_, 70, \_\_\_\_\_, \_\_\_\_\_, 85, \_\_\_\_\_



Circle the odd numbers.



8            15            23            12            16  
 2            11            26            48            13



Circle the even numbers.



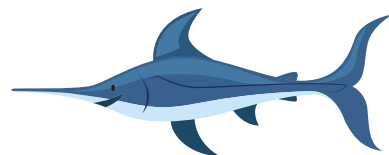
14            26            41            8            25  
 3            18            31            22            44





Write the number in each box.

→		102			105		107		
				114				118	
120			123			126			129
	131			134				138	
		142			145		147		
	151				155				159
				164		166			169
		172			175				
180			183			186		188	
			193		195		197		
200									



# SELF TEST 1

Each answer = 1 point

Complete the family of addition facts.

$\begin{array}{r} 6 \\ + 4 \\ \hline 10 \end{array}$	$\begin{array}{r} 4 \\ + \square \\ \hline 10 \end{array}$	$\begin{array}{r} 8 \\ + 5 \\ \hline 13 \end{array}$	$\begin{array}{r} 5 \\ + \square \\ \hline \square \end{array}$	$\begin{array}{r} 2 \\ + 6 \\ \hline \square \end{array}$	$\begin{array}{r} \square \\ + \square \\ \hline \square \end{array}$	$\begin{array}{r} 7 \\ + 8 \\ \hline \square \end{array}$	$\begin{array}{r} \square \\ + \square \\ \hline \square \end{array}$
--	--	--	---	---	---	---	---

Add.

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

$$\begin{array}{r} 52 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 31 \\ + 48 \\ \hline \end{array}$$

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

Complete the family of subtraction facts.

$\begin{array}{r} 8 \\ - 3 \\ \hline 5 \end{array}$	$\begin{array}{r} 8 \\ - \square \\ \hline 3 \end{array}$	$\begin{array}{r} 14 \\ - 6 \\ \hline 8 \end{array}$	$\begin{array}{r} 14 \\ - \square \\ \hline \square \end{array}$	$\begin{array}{r} 10 \\ - 6 \\ \hline \square \end{array}$	$\begin{array}{r} \square \\ - \square \\ \hline \square \end{array}$	$\begin{array}{r} 3 \\ - 2 \\ \hline \square \end{array}$	$\begin{array}{r} \square \\ - \square \\ \hline \square \end{array}$
---	---	--	--	--	---	---	---

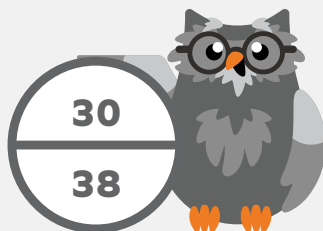
Add.

$$\begin{array}{r} 23 \\ 42 \\ + 51 \\ \hline \end{array}$$

$$\begin{array}{r} 65 \\ 21 \\ + 40 \\ \hline \end{array}$$

$$\begin{array}{r} 30 \\ 45 \\ + 52 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ 21 \\ + 60 \\ \hline \end{array}$$

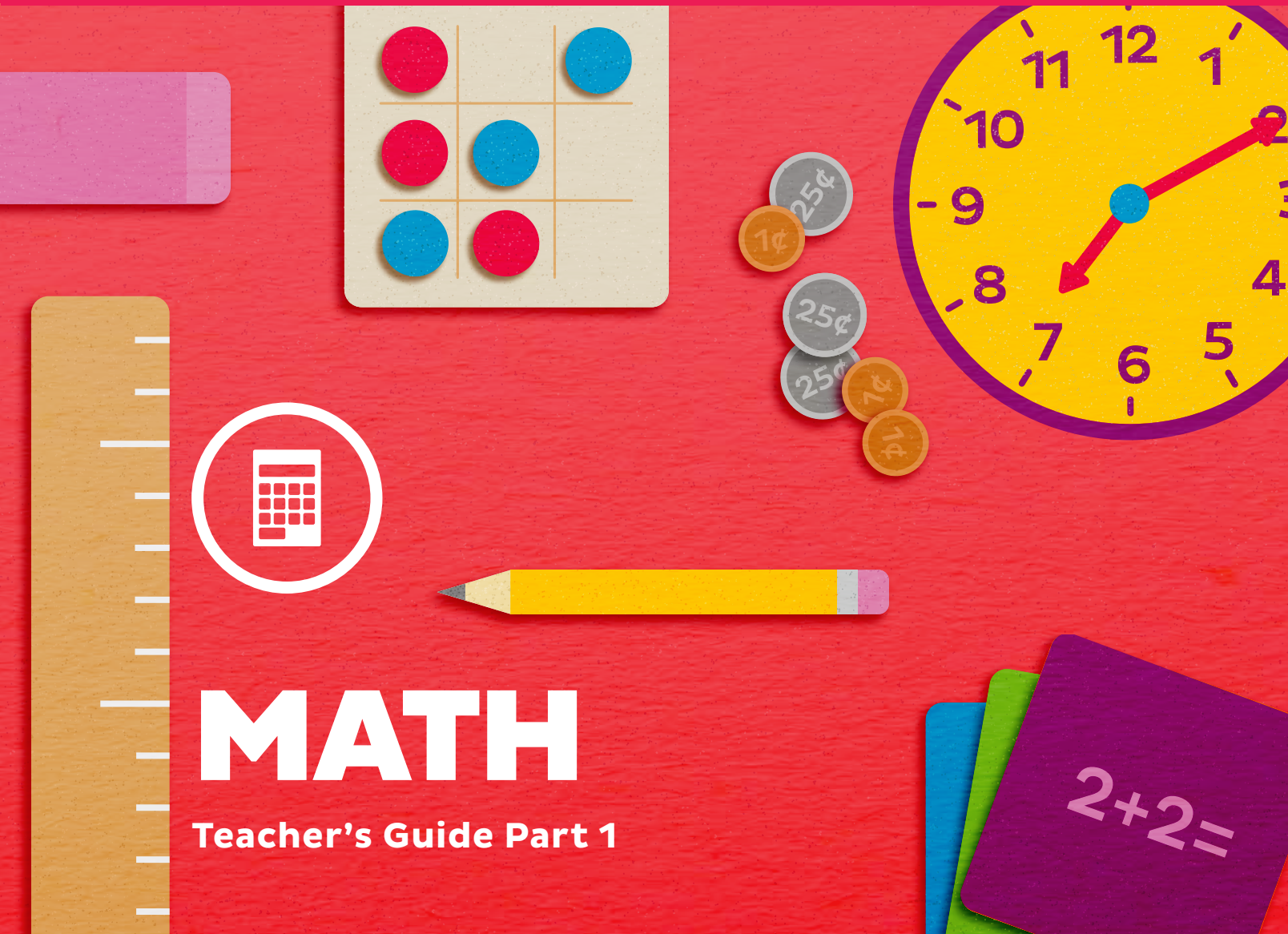


Teacher Check



My Score

LIFEPAC | aop.com Initial \_\_\_\_\_ Date \_\_\_\_\_



# MATH

Teacher's Guide Part 1

▶ **1st Grade**

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# MATH 100

## Teacher's Guide Part 1

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# INSTRUCTIONS FOR MATH

The first grade Teacher's Guides of the LIFEPAC curriculum are designed to provide a step-by-step procedure that will help the teacher prepare for and present each lesson effectively. In the early LIFEPACs, the teacher should read the directions and any other sentences to the children. However, as the school year progresses, the student should be encouraged to begin reading and following his own instructional material in preparation for the independent study approach that begins at the second grade level.

The remainder of the Teacher's Guide includes the following teacher aids:

1) Introduction of Skills

For each unit:

- 2) Materials Needed
- 3) Objectives
- 4) Teacher Instruction
- 5) Answer Keys
- 6) Alternate Tests

After the last unit:

- 7) Math Terms Glossary
- 8) Conversion Charts

The Introduction of Skills is a more detailed overview of skills than that presented in the *Scope and Sequence*. The Math Terms includes a glossary of math terms and a table

of measurements. The Teacher Instruction Pages contain guidelines for teaching each lesson. Additional learning activities provide opportunities for problem solving, encourage the student's interest in learning, and may be used as a reward for good study habits.

Math is a subject that requires skill mastery. But skill mastery needs to be applied toward active student involvement. The Teacher Instruction Pages list the required or suggested materials used in the LIFEPAC lessons. These materials include items generally available in the school or home. Pencils, paper, crayons, scissors, paste and/or glue stick are materials used on a regular basis. Construction paper, beads, buttons, and beans can be used for counting, sets, grouping, fractions, and patterning. Measurements require measuring cups, rulers, and empty containers. Boxes and similar items help in the study of solid shapes.

Any workbook assignment that can be supported by a real-world experience will enhance the student's ability for problem solving. There is an infinite challenge for the teacher to provide a meaningful environment for the study of math. It is a subject that requires constant assessment of student progress. Do not leave the study of math in the classroom.

## MATH 100 INTRODUCTION OF SKILLS

Introduction of Skills is a quick reference guide for the teacher who may be looking for a rule or explanation that applies to a particular skill or to find where or when certain skills are introduced in the LIFEPACs. The first number after the skill identifies the LIFEPAC, and the second number identifies the section.

CONCEPT	LIFEPAC	SECTION	CONCEPT	LIFEPAC	SECTION
Addition			Number line	101	1
facts to 9	101	3	Number order		
facts to 10	102	1	before and after to 99	101	2
1-digit number added to 10	102	3	bigger and smaller to 99	101	2
facts to 18	104	1	before and after to 100	103	5
3 numbers, 1 digit	105	1	before and after to 200	107	3
2 numbers, 2 digits	106	3	greater than, less than to 100	105	2
checking answers	105	1	greater than, less than to 200	107	1
3 numbers, 2 digits	109	1	closest multiple of 10	109	3
Calendar	103	4		110	1
Count			Number sentences	103	2
to 99	101	1	Number words		
to 100	103	4	zero to ten	102	5
to 200	107	1	to twenty	104	3
Directions			to ninety-nine	106	2
north, east, south, west	110	3	Operation symbols		
Estimation			+, -, =	102	1
size and weight	102	4	≠	103	2
numbers	107	5	>, <	106	2
Even and odd numbers	104	2	Ordinal numbers		
Families of facts			to tenth	102	5
addition and subtraction	109	1	Place value		
Fractions			for ones	102	3
$\frac{1}{2}$ of an object, of a set	103	3	for tens	102	3
$\frac{1}{4}$ of an object, of a set	105	3	for hundreds	107	2
Graphs (Charts)			Problem solving		
posting data	105	4	estimation	102	4
	107	5	how many facts equal a number	102	5
	109	3	sensible answers	109	4
Measurements			Sequencing and number patterns	102	5
objects big and little	101	4	Shapes		
objects greater than, less than	101	4	flat	101	4
long and short	101	4	solid	102	4
dozen	105	3	Skip counting		
ruler—inch	101	4	by 10's	101	1
ruler—one-half inch	108	2		104	2
weight	102	4	by 2's	104	2
Money			by 5's	106	1
pennies, dimes	104	4	objects by grouping	108	5
nickels	106	4			

## 2. READING A NUMBER SENTENCE

### PAGES 8 & 9: NUMBER SENTENCES

#### MATERIALS NEEDED

- pencils

#### Concept:

reading number sentences

#### Teacher Goal:

To teach the children to read number sentences in addition and subtraction.

#### Teaching Pages 8 and 9:


Turn to page 8. Tell the children that a sentence is a statement that tells them something. Explain to them that they can make a statement using numbers and/or words. Have the children point to the sets of pans and then have them point to the number fact. Ask them what the operation sign (+) stands for (plus) and what the sign (=) stands for (equals). Have the children point to each word as they read the sentence, "Three plus four equals seven." Read the directions and have the children complete the page.

Turn to page 9. Remind the children that a sentence is a statement that tells them something. It may be in numbers or in words. Have the students point to the sets of hearts and then have them point to the number fact. Ask them what the operation sign (-) stands for (minus) and what the sign (=) stands for (equals). Have the children point to each word as they read the sentence, "Five minus two equals three." Read the directions and have the children complete the page.


FRACTIONS, TIME, AND SYMBOLS | Unit 3

## 2. READING A NUMBER SENTENCE


+ plus      = equals





3 + 4 = 7




Three **plus** four **equals** seven.




 Write the missing word on the line.  
Read the sentence aloud.

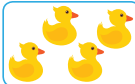


2 + 2 = 4




Two plus two equals four.







4 + 1 = 5

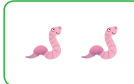


Four plus one equals five.






5 + 2 = 7




Five plus two equals seven.




• | Section 2

Unit 3 | FRACTIONS, TIME, AND SYMBOLS


+ plus      - minus      = equals




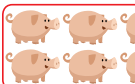
5 - 2 = 3



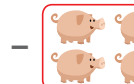
Five **minus** two **equals** three.




 Write the missing word on the line.  
Read the sentence aloud.




6 - 4 = 2




Six minus four equals two.







4 - 1 = 3




Four minus one equals three.






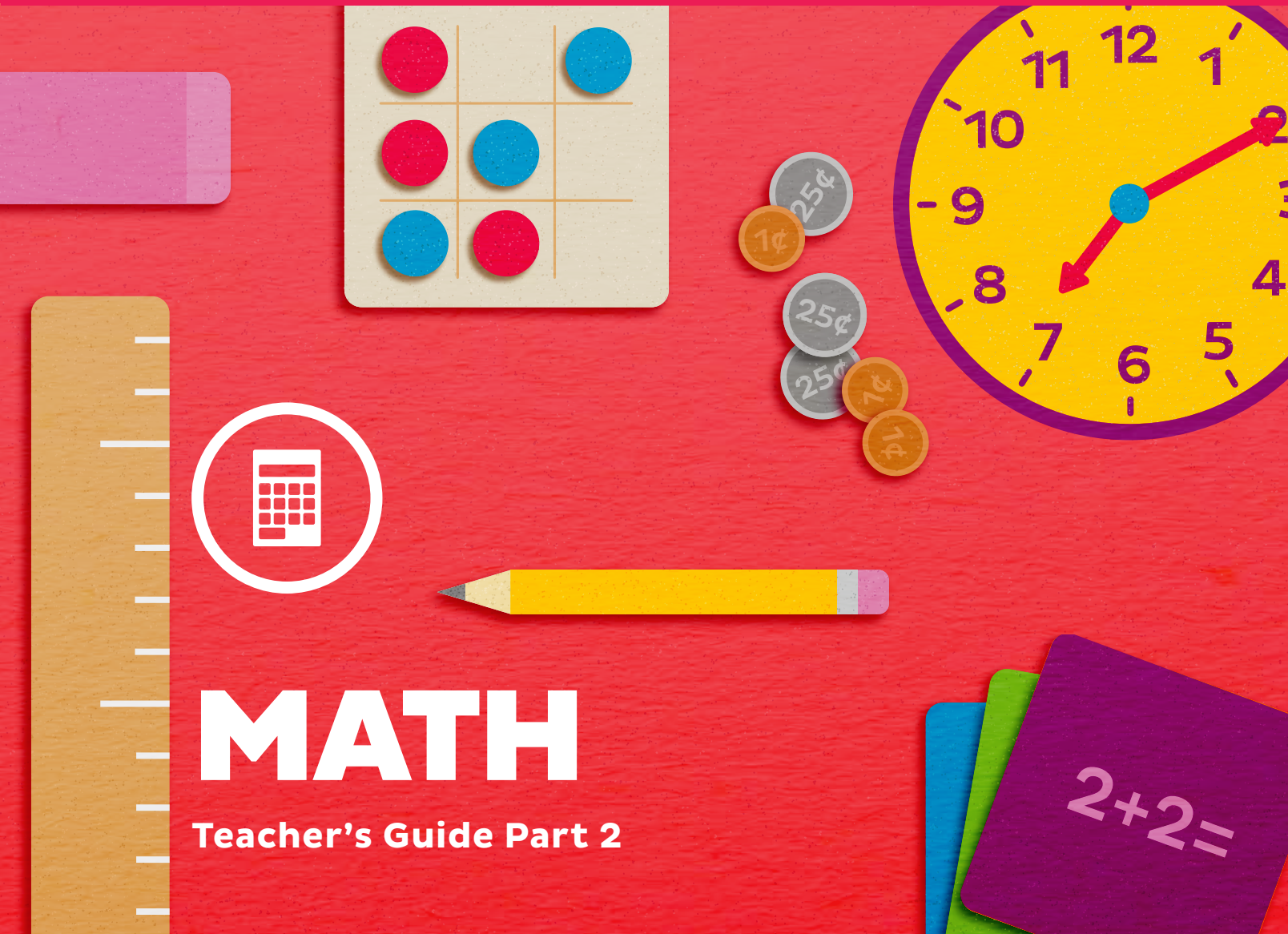
7 - 3 = 4



Seven minus three equals four.



Section 2 | 9



# MATH

Teacher's Guide Part 2

▶ **1st Grade**

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# MATH 100

## Teacher's Guide Part 2

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## 2. NUMBER WORDS TO 99

### PAGES 8 & 9: NUMBERS AS WORDS

#### MATERIALS NEEDED

- pencils
- paper

#### Concept:

number words to 99

#### Teacher Goal:

To teach the children to read and write number words to ninety-nine (99).

#### Teaching Pages 8 and 9:

Turn to page 8. Have the students read the number words to *nineteen* aloud. Point to the numbers 10 through 90. Have the children say the numbers aloud. Remind them that this is skip counting by 10's. Have the students use a piece of paper to cover the number symbols and ask them to say the number words aloud. Point out that the *u* is dropped in the spelling of the word *forty*. Compare the location of the *r* in three to its position in the word *thirty*. Ask the students to point to the words *twenty* and *three*. Tell them that we put a hyphen between the two words to join them together and make them one word. Tell the students to write the word *forty* on a piece of paper. Have them write the word *six* next to it. Explain to the students that these numbers mean two different sets—one set of *forty* and one set of *six*. They must add a hyphen between the words to show they mean one set of *forty-six*. Point to the word *seventy-one* on page 8 and have the students say it aloud.

#### NUMBER WORDS TO 99 | Unit 6

### 2. NUMBER WORDS TO 99

1	one	11	eleven
2	two	12	twelve
3	three	13	thirteen
4	four	14	fourteen
5	five	15	fifteen
6	six	16	sixteen
7	seven	17	seventeen
8	eight	18	eighteen
9	nine	19	nineteen

10	ten	23	twenty-three
20	twenty	46	forty-six
30	thirty	71	seventy-one
40	forty		
50	fifty		
60	sixty		
70	seventy		
80	eighty		
90	ninety		



8 | Section 2

#### Unit 6 | NUMBER WORDS TO 99



Write the words on the line.

38 thirty-eight  
 21 twenty-one  
 47 forty-seven  
 83 eighty-three  
 99 ninety-nine  
 25 twenty-five  
 54 fifty-four  
 66 sixty-six  
 92 ninety-two  
 80 eighty  
 75 seventy-five  
 19 nineteen



Match.

88 ninety  
 99 seventy-six  
 37 twenty-nine  
 78 forty-two  
 90 forty-five  
 29 eighty-eight  
 42 thirty-three  
 45 ninety-nine  
 76 thirty-seven  
 63 forty-nine  
 49 seventy-eight  
 33 sixty-three



Write the missing number word.

Three plus eight equals eleven.  
 Nine plus seven equals sixteen.  
Seven plus five equals twelve.  
 Six plus four equals ten.

Section 2 | 9

## PAGE 11: NUMBER WORDS

### MATERIALS NEEDED

- pencils

#### Concept:

number words to ninety-nine

#### Teacher Goal:

To teach the children to write number words to ninety-nine.

#### Teaching Page 11:

Turn to page 11. Read the directions with the students. In the first section, have them write the numbers in words on each line. Remind the students to use hyphens. Tell them to use good posture and to hold their pencils correctly. In the last section, the children should write the numbers using number symbols and then arrange the numbers in number order.



Write the number words.

11 eleven      15 fifteen  
 12 twelve      16 sixteen  
 13 thirteen      17 seventeen  
 14 fourteen      18 eighteen  
 19 nineteen

24 twenty-four  
 52 fifty-two



Write the number symbols on the line.  
 Write the numbers in order from smallest to largest.

thirteen 13      thirty-five 35      eleven 11      fifteen 15  
 forty-three 43      eighty-nine 89      seven 7      sixty-two 62  
7   11   13   15   35   43   62   89

# MATH 106

ALTERNATE LIFEPAC TEST

Name \_\_\_\_\_

Date \_\_\_\_\_



My Score



40

50

**Each answer = 1 point, except where otherwise noted**

**Write the answer to the facts.**

$$\begin{array}{r} 6 \\ + 5 \\ \hline \end{array} \quad \begin{array}{r} 9 \\ + 9 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ + 8 \\ \hline \end{array} \quad \begin{array}{r} 10 \\ - 3 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ - 0 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ - 5 \\ \hline \end{array}$$

**Count by 2's, 5's, and 10's.** (each row, 1 point)

2, \_\_\_\_\_, 6, \_\_\_\_\_, \_\_\_\_\_, 12, 14

\_\_\_\_\_, 10, \_\_\_\_\_, \_\_\_\_\_, 25, 30, \_\_\_\_\_

10, 20, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, 60, 70

**Circle the odd numbers.** (2 points)

10      27      39      82      46      73      55