

FIRST GRADE MATHEMATICS

Numeracy First

Student Workbook

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20

Student _____

Teacher _____



What's Inside

Part 1: Numbers to 120 **4**

Numbers 0–30 4

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? How to Use This Workbook

1 Part 1: Numbers to 120

Twelve decade lessons (0–10, 11–20 ... 111–120), each with four pages: **Meet the Numbers** (tens and ones, the hundred chart, and the number line), **Trace and Write, Count**, and **Show**. A two-page Check-In follows every three decades. Then six **Counting by Tens** lessons teach counting by tens on and off the decade (6, 16, 26 ...), past 100, and back.

1.1 Part 2: First Grade Units

Nine units: Addition Strategies, Subtraction Strategies, Part-Whole and the Equal Sign, Place Value, Adding and Subtracting to 100, Measurement, Time, Data, and Shapes and Fractions. Each lesson has two or more practice pages, and every unit ends with a Progress Check.



End-of-Year Review and Assessment

A final review, a certificate, and a full-year Pretest and Posttest with a score record.



Pencil = write or circle

Students write a number, circle an answer, or draw.



Crayon = color

Students color pictures, boxes, or shapes.



Eye = look and count

Students look carefully and count.



Ear = listen

The teacher reads a story or direction aloud.



Green dot = start here

Every tracing number starts at the green dot.



Teacher prompt

The gray box at the bottom of many pages gives the words to use when introducing the page. Model it first, then let students try.

1.1 Count All: See the Whole Problem

I can add two groups.

1  Count all the counters. Write the sum.



$$5 + 3 = \underline{\hspace{1cm}}$$



$$6 + 2 = \underline{\hspace{1cm}}$$



$$4 + 4 = \underline{\hspace{1cm}}$$



$$7 + 3 = \underline{\hspace{1cm}}$$



$$8 + 2 = \underline{\hspace{1cm}}$$



$$6 + 4 = \underline{\hspace{1cm}}$$

Teacher prompt: Start by counting every counter: 1, 2, 3 ... 8. Then ask: "Did we need to count the red ones again? We already know there are 5!"

1.1 Count All: See the Whole Problem

I can add two groups.

1  Count all the pictures. Touch each one as you count. Write the sum.



$$4 + 3 = \underline{\hspace{1cm}}$$



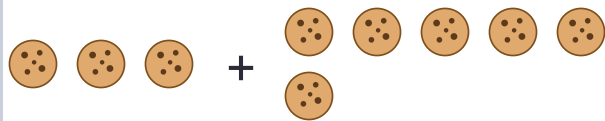
$$6 + 3 = \underline{\hspace{1cm}}$$



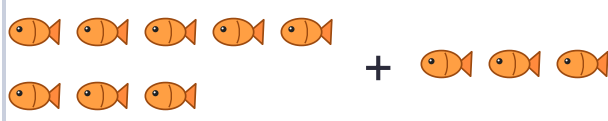
$$5 + 5 = \underline{\hspace{1cm}}$$



$$7 + 2 = \underline{\hspace{1cm}}$$



$$3 + 6 = \underline{\hspace{1cm}}$$



$$8 + 3 = \underline{\hspace{1cm}}$$

Teacher prompt: Touch and count every picture, starting at 1. Then say the number sentence: “4 and 3 make 7.”

1.1 Count All: See the Whole Problem

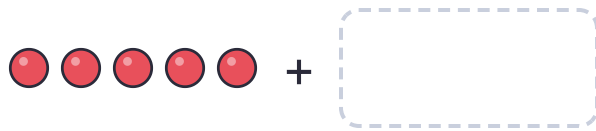
I can add two groups.

1  Draw the second group. Count all. Write the sum.



Draw 2 more.

$$4 + 2 = \underline{\hspace{1cm}}$$



Draw 4 more.

$$5 + 4 = \underline{\hspace{1cm}}$$



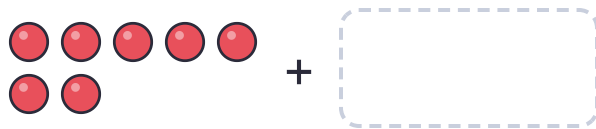
Draw 3 more.

$$6 + 3 = \underline{\hspace{1cm}}$$



Draw 5 more.

$$3 + 5 = \underline{\hspace{1cm}}$$



Draw 2 more.

$$7 + 2 = \underline{\hspace{1cm}}$$



Draw 4 more.

$$8 + 4 = \underline{\hspace{1cm}}$$

Teacher prompt: Students draw dots for the second group, then count every dot from 1.

1.2 Add on a Number Line

I can add on a number line.

- 1  Start at the first number. Jump forward. Write where you land.

$$9 + 4 = \underline{\hspace{2cm}}$$



$$12 + 5 = \underline{\hspace{2cm}}$$



$$7 + 6 = \underline{\hspace{2cm}}$$



$$14 + 4 = \underline{\hspace{2cm}}$$



Teacher prompt: Problem 1 is modeled. Draw one jump for each number you add.

1.2 Add on a Number Line: More Practice

I can add on a number line.

1  Draw the jumps. Write the sum.

$$8+7= \begin{array}{l} \underline{\hspace{1cm}} \\ \text{-----} \\ \underline{\hspace{1cm}} \end{array}$$



$$11+6= \begin{array}{l} \underline{\hspace{1cm}} \\ \text{-----} \\ \underline{\hspace{1cm}} \end{array}$$



$$5+9= \begin{array}{l} \underline{\hspace{1cm}} \\ \text{-----} \\ \underline{\hspace{1cm}} \end{array}$$



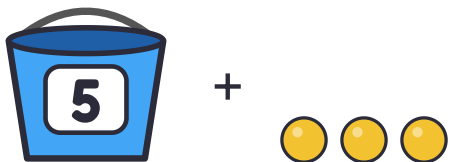
$$13+7= \begin{array}{l} \underline{\hspace{1cm}} \\ \text{-----} \\ \underline{\hspace{1cm}} \end{array}$$



1.3 Count On with the Bucket

I can count on from a number.

1  The bucket hides the first group. Start with the number on the bucket. Count on the counters.



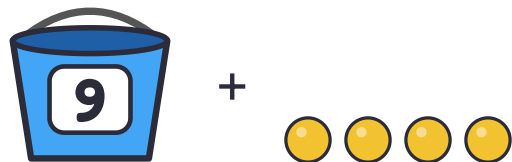
5 are in the bucket.

$$5 + 3 = \underline{\hspace{2cm}}$$



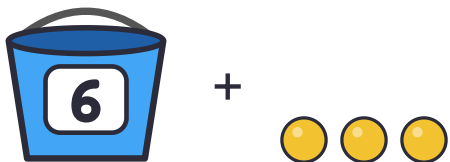
7 are in the bucket.

$$7 + 2 = \underline{\hspace{2cm}}$$



9 are in the bucket.

$$9 + 4 = \underline{\hspace{2cm}}$$



6 are in the bucket.

$$6 + 3 = \underline{\hspace{2cm}}$$



8 are in the bucket.

$$8 + 1 = \underline{\hspace{2cm}}$$



12 are in the bucket.

$$12 + 3 = \underline{\hspace{2cm}}$$

Teacher prompt: We know there are 5 in the bucket, so we don't need to count them. Say 5 (tap the bucket), then count on: 6, 7, 8.

1.3 Count On with the Bucket: Drop In and Count On

I can count on from a number.

1  Counters drop into the bucket. Start at the bucket number. Write each number as a counter drops in.



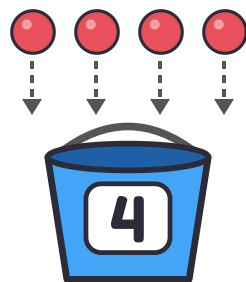
6 ...

$$6 + 3 =$$



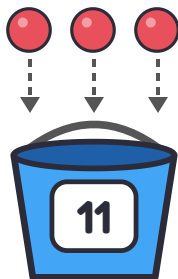
9 ...

$$9 + 2 =$$



4 ...

$$4 + 4 =$$



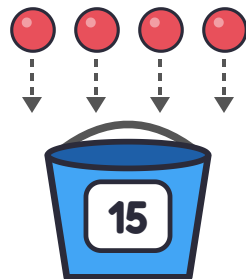
11 ...

$$11 + 3 =$$



8 ...

$$8 + 1 =$$



15 ...

$$15 + 4 =$$

Teacher prompt: Drop counters into a real cup as students count on: “6 ... 7, 8, 9.” Students write each number they say.

1.4 Count On with a Number and Dice

I can count on from a number.

1  Say the number on the card. Count on the dots. Write the sum.

$$8 + \begin{array}{|c|} \hline \bullet \\ \hline \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

$$11 + \begin{array}{|c|} \hline \bullet \bullet \\ \hline \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

$$6 + \begin{array}{|c|} \hline \bullet \bullet \\ \hline \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

$$14 + \begin{array}{|c|} \hline \bullet \\ \hline \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

$$9 + \begin{array}{|c|} \hline \bullet \bullet \\ \hline \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

$$15 + \begin{array}{|c|} \hline \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

$$12 + \begin{array}{|c|} \hline \bullet \bullet \\ \hline \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

$$7 + \begin{array}{|c|} \hline \bullet \\ \hline \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

$$16 + \begin{array}{|c|} \hline \bullet \bullet \\ \hline \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

Teacher prompt: Say the number on the card, then count on the dots: “11 ... 12, 13, 14.”

1.4 Count On with a Number and Dice: More Practice

I can count on from a number.

1  Say the number. Count on the dots. Write the sum.

$$13 + \begin{array}{|c|} \hline \bullet \bullet \\ \hline \bullet \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

$$7 + \begin{array}{|c|} \hline \bullet \bullet \bullet \\ \hline \bullet \bullet \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

$$18 + \begin{array}{|c|} \hline \bullet \\ \hline \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

$$10 + \begin{array}{|c|} \hline \bullet \bullet \\ \hline \bullet \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

$$16 + \begin{array}{|c|} \hline \bullet \bullet \\ \hline \bullet \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

$$9 + \begin{array}{|c|} \hline \bullet \bullet \bullet \\ \hline \bullet \bullet \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

$$12 + \begin{array}{|c|} \hline \bullet \bullet \\ \hline \bullet \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

$$15 + \begin{array}{|c|} \hline \bullet \bullet \\ \hline \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

$$11 + \begin{array}{|c|} \hline \bullet \bullet \bullet \\ \hline \bullet \bullet \bullet \\ \hline \end{array} = \underline{\hspace{2cm}}$$

Teacher prompt: Tap the number card and say it. Then touch each dot as you count on: “13 ... 14, 15, 16, 17.”

1.4 Count On with a Number and Dice: More Practice

I can count on from the bigger number.

1  The dice comes first! Start with the bigger number. Count on the dots.

$$\begin{array}{|c|} \hline \cdot \\ \hline \cdot \\ \hline \cdot \\ \hline \end{array} + 14 = \underline{\hspace{1cm}}$$

$$\begin{array}{|c|} \hline \cdot \cdot \\ \hline \cdot \cdot \\ \hline \cdot \cdot \\ \hline \end{array} + 8 = \underline{\hspace{1cm}}$$

$$\begin{array}{|c|} \hline \cdot \\ \hline \\ \hline \cdot \\ \hline \end{array} + 17 = \underline{\hspace{1cm}}$$

$$\begin{array}{|c|} \hline \cdot \cdot \\ \hline \cdot \cdot \\ \hline \cdot \cdot \\ \hline \end{array} + 11 = \underline{\hspace{1cm}}$$

$$\begin{array}{|c|} \hline \cdot \cdot \\ \hline \cdot \cdot \\ \hline \cdot \cdot \\ \hline \end{array} + 6 = \underline{\hspace{1cm}}$$

$$\begin{array}{|c|} \hline \cdot \cdot \\ \hline \cdot \cdot \\ \hline \cdot \cdot \\ \hline \end{array} + 15 = \underline{\hspace{1cm}}$$

$$\begin{array}{|c|} \hline \\ \hline \cdot \\ \hline \\ \hline \end{array} + 19 = \underline{\hspace{1cm}}$$

$$\begin{array}{|c|} \hline \cdot \cdot \\ \hline \cdot \cdot \\ \hline \cdot \cdot \\ \hline \end{array} + 12 = \underline{\hspace{1cm}}$$

$$\begin{array}{|c|} \hline \cdot \cdot \\ \hline \cdot \cdot \\ \hline \cdot \cdot \\ \hline \end{array} + 9 = \underline{\hspace{1cm}}$$

Teacher prompt: Even when the dice comes first, put the number card in your head and count on the dots. The bigger number goes in your head.

1.5 Count On from the Bigger Number

I can count on to add.

1  Start at the first number. Count on. Use the number path to help.

$$9 + 2 = \underline{\hspace{2cm}}$$



$$13 + 3 = \underline{\hspace{2cm}}$$



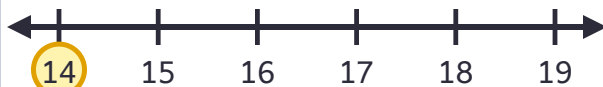
$$16 + 1 = \underline{\hspace{2cm}}$$



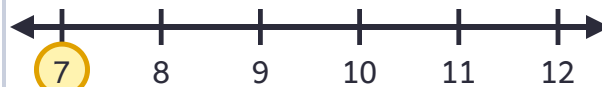
$$11 + 3 = \underline{\hspace{2cm}}$$



$$14 + 2 = \underline{\hspace{2cm}}$$



$$7 + 3 = \underline{\hspace{2cm}}$$



2  Circle the bigger number. Then count on.

$$2 + 15 = \underline{\hspace{2cm}}$$

$$3 + 8 = \underline{\hspace{2cm}}$$

$$1 + 17 = \underline{\hspace{2cm}}$$

$$2 + 6 = \underline{\hspace{2cm}}$$

Teacher prompt: Point to the first number and say it. Then hop forward and count on: “13 ... 14, 15, 16.”

1.5

Count On from the Bigger Number: More Practice

I can count on from the bigger number.

1  Circle the bigger number. Count on from it.

$$2+9=$$

$$8+3=$$

$$1+12=$$

$$13+2=$$

$$3+15=$$

$$10+3=$$

$$2+17=$$

$$14+3=$$

$$3+9=$$

$$16+2=$$

$$1+18=$$

$$5+3=$$

Teacher prompt: Before solving, circle the bigger number. Count on from it. 2 + 9: start at 9, not 2!

1.5 Count On from the Bigger Number: More Practice

I can count on 1, 2, or 3.

1  Count on 1, 2, or 3. Write the number that comes out.

+1 machine

In	Out
7	
12	
15	
9	
18	

+2 machine

In	Out
8	
13	
6	
16	
11	

+3 machine

In	Out
9	
14	
5	
17	
12	

Teacher prompt: Counting on works best when we add 1, 2, or 3. Say the In number, then count on.

1.6 Doubles

I can add doubles.

1  Each picture shows a double. Write the sum.



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



$$4+4= \underline{\hspace{2cm}}$$



$$5+5= \underline{\hspace{2cm}}$$



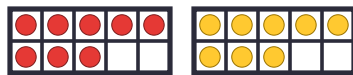
$$3+3= \underline{\hspace{2cm}}$$



$$6+6= \underline{\hspace{2cm}}$$



$$7+7= \underline{\hspace{2cm}}$$



$$8+8= \underline{\hspace{2cm}}$$



$$9+9= \underline{\hspace{2cm}}$$



$$10+10= \underline{\hspace{2cm}}$$

Teacher prompt: A double is two groups that are the same. Say the doubles rhyme: 5 + 5, my fingers are 10!

1.6 Doubles: More Practice

I can add doubles.

1  Solve the doubles.

$1+1=$ _____

$6+6=$ _____

$3+3=$ _____

$9+9=$ _____

$7+7=$ _____

$2+2=$ _____

$10+10=$ _____

$4+4=$ _____

$8+8=$ _____

2  Circle the doubles.

$4 + 4$ $3 + 5$ $6 + 6$ $7 + 2$ $9 + 9$ $5 + 4$

1.6 Doubles: More Practice

I can add doubles.

1  Two towers that are the same make a double. Write the sum.



$$3+3= \underline{\hspace{2cm}}$$



$$6+6= \underline{\hspace{2cm}}$$



$$8+8= \underline{\hspace{2cm}}$$



$$5+5= \underline{\hspace{2cm}}$$



$$9+9= \underline{\hspace{2cm}}$$

2  Finish the doubles table.

$$1+1= \underline{\hspace{2cm}}$$

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

$$3+3=6$$

$$4+4= \underline{\hspace{2cm}}$$

$$5+5= \underline{\hspace{2cm}}$$

$$6+6=12$$

$$7+7= \underline{\hspace{2cm}}$$

$$8+8= \underline{\hspace{2cm}}$$

$$9+9=18$$

$$10+10= \underline{\hspace{2cm}}$$

Teacher prompt: Doubles sums count by 2s: 2, 4, 6, 8 ... 20. Say them together as a chant.

1.6 Doubles: More Practice

I know my doubles facts.

1  What double makes each sum?

$$\underline{\quad} + \underline{\quad} = 12$$

$$\underline{\quad} + \underline{\quad} = 8$$

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

$$\underline{\quad} + \underline{\quad} = 18$$

$$\underline{\quad} + \underline{\quad} = 14$$

$$\underline{\quad} + \underline{\quad} = 10$$

2  Say it and write it.

Double 4 is $\underline{\quad}$

Double 7 is $\underline{\quad}$

Double 9 is $\underline{\quad}$

Double 6 is $\underline{\quad}$

3  Solve the doubles.

$$8 + 8 = \underline{\quad}$$

$$5 + 5 = \underline{\quad}$$

$$9 + 9 = \underline{\quad}$$

$$6 + 6 = \underline{\quad}$$

$$7 + 7 = \underline{\quad}$$

$$10 + 10 = \underline{\quad}$$

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

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

Teacher prompt: $12 = 6 + 6$. Which number, added to itself, makes 12? Use cube towers to check.

1.7 Doubles Plus One

I can use doubles to add.

1  Use the double to help. Then add one more.

$$3+3= \underline{\hspace{1cm}}$$

so

$$3+4= \underline{\hspace{1cm}}$$

$$5+5= \underline{\hspace{1cm}}$$

so

$$5+6= \underline{\hspace{1cm}}$$

$$6+6= \underline{\hspace{1cm}}$$

so

$$6+7= \underline{\hspace{1cm}}$$

$$4+4= \underline{\hspace{1cm}}$$

so

$$4+5= \underline{\hspace{1cm}}$$

$$7+7= \underline{\hspace{1cm}}$$

so

$$7+8= \underline{\hspace{1cm}}$$

$$8+8= \underline{\hspace{1cm}}$$

so

$$8+9= \underline{\hspace{1cm}}$$

Teacher prompt: 6 + 7 is a double plus one: 6 + 6 = 12, and one more is 13.

1.7 Doubles Plus One: More Practice

I can use doubles to add.

1  Find the double inside. Then add.

$$5+6= \underline{\hspace{1cm}}$$

$$7+8= \underline{\hspace{1cm}}$$

$$4+5= \underline{\hspace{1cm}}$$

$$9+10= \underline{\hspace{1cm}}$$

$$3+4= \underline{\hspace{1cm}}$$

$$8+9= \underline{\hspace{1cm}}$$

$$6+7= \underline{\hspace{1cm}}$$

$$2+3= \underline{\hspace{1cm}}$$

$$10+9= \underline{\hspace{1cm}}$$

1.7 Doubles Plus One: More Practice

I can use doubles to add.

1  Solve. Write the double you used.

$$6+7=$$

I used _____ + _____

$$3+4=$$

I used _____ + _____

$$8+9=$$

I used _____ + _____

$$5+6=$$

I used _____ + _____

$$7+8=$$

I used _____ + _____

$$9+10=$$

I used _____ + _____

2  Double or double plus one? Solve.

$$4+4=$$

$$4+5=$$

$$8+8=$$

$$9+8=$$

$$6+6=$$

$$7+6=$$

$$5+5=$$

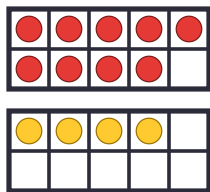
$$5+6=$$

Teacher prompt: Find the smaller number. Double it, then add one more.

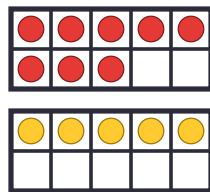
1.8 Make a Ten to Add

I can make a ten to add.

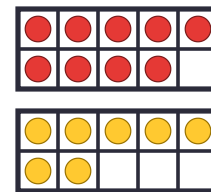
1  Move counters to fill the top ten frame. Then add.



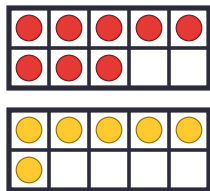
$$9 + 4 = 10 + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$



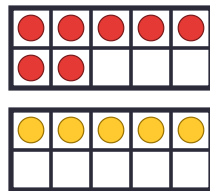
$$8 + 5 = 10 + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$



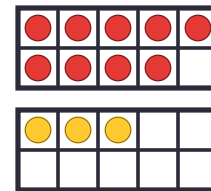
$$9 + 7 = 10 + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$



$$8 + 6 = 10 + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$



$$7 + 5 = 10 + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$



$$9 + 3 = 10 + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

Teacher prompt: 9 + 4: give 1 from the 4 to make 10. Now it is 10 + 3 = 13.

1.8 Make a Ten to Add: More Practice

I can make a ten to add.

1  Make a ten. Then add. Write the sum.

$$9+5= \underline{\hspace{1cm}}$$

$$8+4= \underline{\hspace{1cm}}$$

$$9+8= \underline{\hspace{1cm}}$$

$$7+6= \underline{\hspace{1cm}}$$

$$8+7= \underline{\hspace{1cm}}$$

$$9+6= \underline{\hspace{1cm}}$$

$$6+8= \underline{\hspace{1cm}}$$

$$5+9= \underline{\hspace{1cm}}$$

$$7+9= \underline{\hspace{1cm}}$$

1.8 Make a Ten to Add: More Practice

I can make a ten to add.

1  Partners of 10. Write the missing number.

$$9 + \underline{\quad} = 10$$

$$8 + \underline{\quad} = 10$$

$$7 + \underline{\quad} = 10$$

$$6 + \underline{\quad} = 10$$

$$3 + \underline{\quad} = 10$$

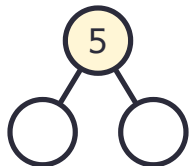
$$1 + \underline{\quad} = 10$$

$$2 + \underline{\quad} = 10$$

$$4 + \underline{\quad} = 10$$

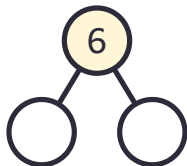
2  Break apart the second number to make a ten. Then add.

$$9 + 5$$



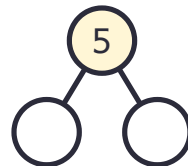
$$10 + \underline{\quad} = \underline{\quad}$$

$$8 + 6$$



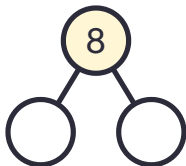
$$10 + \underline{\quad} = \underline{\quad}$$

$$7 + 5$$



$$10 + \underline{\quad} = \underline{\quad}$$

$$9 + 8$$



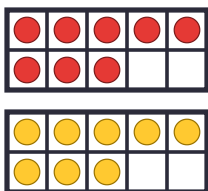
$$10 + \underline{\quad} = \underline{\quad}$$

Teacher prompt: 9 + 5: 9 needs 1 to make 10. Break 5 into 1 and 4. Now it is 10 + 4 = 14.

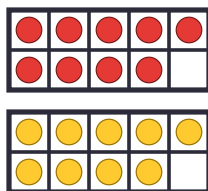
1.8 Make a Ten to Add: More Practice

I can make a ten to add.

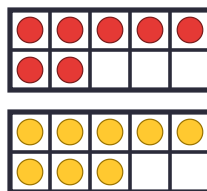
1  Move counters to make a ten. Then add.



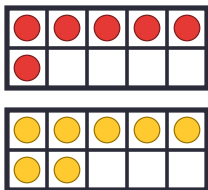
$$8+8=10+\underline{\hspace{1cm}}=\underline{\hspace{1cm}}$$



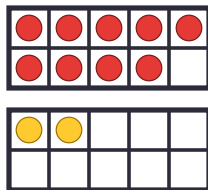
$$9+9=10+\underline{\hspace{1cm}}=\underline{\hspace{1cm}}$$



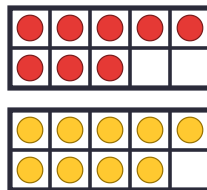
$$7+8=10+\underline{\hspace{1cm}}=\underline{\hspace{1cm}}$$



$$6+7=10+\underline{\hspace{1cm}}=\underline{\hspace{1cm}}$$



$$9+2=10+\underline{\hspace{1cm}}=\underline{\hspace{1cm}}$$



$$8+9=10+\underline{\hspace{1cm}}=\underline{\hspace{1cm}}$$

2  Make a ten. Write the sum.

$$9+7=\underline{\hspace{1cm}}$$

$$8+5=\underline{\hspace{1cm}}$$

$$7+7=\underline{\hspace{1cm}}$$

$$6+9=\underline{\hspace{1cm}}$$

Teacher prompt: Always fill the top ten frame. Count how many moved.

1.9 Add Three Numbers

I can add three numbers.

1  Look for a ten or a double first.

Circle two numbers to add first.

$$4 + 6 + 3 = \underline{\hspace{2cm}}$$

Circle two numbers to add first.

$$5 + 5 + 2 = \underline{\hspace{2cm}}$$

Circle two numbers to add first.

$$2 + 7 + 3 = \underline{\hspace{2cm}}$$

Circle two numbers to add first.

$$8 + 2 + 6 = \underline{\hspace{2cm}}$$

Circle two numbers to add first.

$$3 + 3 + 4 = \underline{\hspace{2cm}}$$

Circle two numbers to add first.

$$1 + 9 + 5 = \underline{\hspace{2cm}}$$

Teacher prompt: You can add in any order. $4 + 6 + 3$: 4 and 6 make 10, then $10 + 3 = 13$.

1.9 Add Three Numbers: More Practice

I can add three numbers.

1  Add. Show which two you added first.

$$7+3+4= \underline{\hspace{1cm}}$$

$$6+6+1= \underline{\hspace{1cm}}$$

$$2+8+9= \underline{\hspace{1cm}}$$

$$5+4+5= \underline{\hspace{1cm}}$$

$$3+7+7= \underline{\hspace{1cm}}$$

$$4+4+2= \underline{\hspace{1cm}}$$

$$9+1+6= \underline{\hspace{1cm}}$$

$$2+5+3= \underline{\hspace{1cm}}$$

$$8+8+1= \underline{\hspace{1cm}}$$

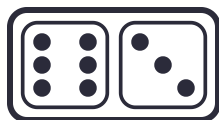
1.10 Turn-Around Facts

I can switch the order of addends.

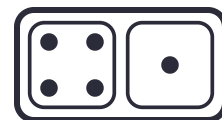
1 Write two addition facts for each domino.



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



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



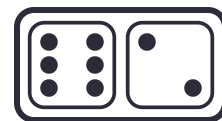
_____	+	_____	=	_____
_____		_____		_____
_____	+	_____	=	_____
_____		_____		_____



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



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



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

Teacher prompt: Turn the domino around: 2 + 5 and 5 + 2 have the same sum.

1.10 Turn-Around Facts: More Practice

I can switch the order of addends.

1  Fill in the turn-around fact.

$$3+8=8+\underline{\hspace{1cm}}$$

$$6+4=4+\underline{\hspace{1cm}}$$

$$2+9=9+\underline{\hspace{1cm}}$$

$$7+5=5+\underline{\hspace{1cm}}$$

$$1+12=12+\underline{\hspace{1cm}}$$

$$4+9=9+\underline{\hspace{1cm}}$$

1.11 Which Strategy?

I can choose a strategy to add.

1  Read each fact. Write it under the best strategy. Then solve.

15 + 2 7 + 7 9 + 4 6 + 6 13 + 3 8 + 5 2 + 11 9 + 9 9 + 6

Count On

_____	=	_____
-----		-----
_____		_____
_____	=	_____
-----		-----
_____		_____
_____	=	_____
-----		-----

Doubles

_____	=	_____
-----		-----
_____		_____
_____	=	_____
-----		-----
_____		_____
_____	=	_____
-----		-----

Make a Ten

_____	=	_____
-----		-----
_____		_____
_____	=	_____
-----		-----
_____		_____
_____	=	_____
-----		-----

Teacher prompt: Count on when adding 1, 2, or 3. Use doubles when the numbers are the same or close. Make a ten when one number is 8 or 9.

1.11 Which Strategy?: More Practice

I can choose a strategy to add.

1  Solve. Write C (count on), D (doubles), or T (make a ten) in the box to show your strategy.

$$9+3= \begin{array}{l} \underline{\hspace{1cm}} \\ \text{---} \\ \underline{\hspace{1cm}} \end{array}$$

$$6+7= \begin{array}{l} \underline{\hspace{1cm}} \\ \text{---} \\ \underline{\hspace{1cm}} \end{array}$$

$$14+2= \begin{array}{l} \underline{\hspace{1cm}} \\ \text{---} \\ \underline{\hspace{1cm}} \end{array}$$

$$8+8= \begin{array}{l} \underline{\hspace{1cm}} \\ \text{---} \\ \underline{\hspace{1cm}} \end{array}$$

$$9+7= \begin{array}{l} \underline{\hspace{1cm}} \\ \text{---} \\ \underline{\hspace{1cm}} \end{array}$$

$$5+5= \begin{array}{l} \underline{\hspace{1cm}} \\ \text{---} \\ \underline{\hspace{1cm}} \end{array}$$

$$3+16= \begin{array}{l} \underline{\hspace{1cm}} \\ \text{---} \\ \underline{\hspace{1cm}} \end{array}$$

$$8+6= \begin{array}{l} \underline{\hspace{1cm}} \\ \text{---} \\ \underline{\hspace{1cm}} \end{array}$$

$$7+8= \begin{array}{l} \underline{\hspace{1cm}} \\ \text{---} \\ \underline{\hspace{1cm}} \end{array}$$

$$11+3= \begin{array}{l} \underline{\hspace{1cm}} \\ \text{---} \\ \underline{\hspace{1cm}} \end{array}$$

$$9+9= \begin{array}{l} \underline{\hspace{1cm}} \\ \text{---} \\ \underline{\hspace{1cm}} \end{array}$$

$$8+4= \begin{array}{l} \underline{\hspace{1cm}} \\ \text{---} \\ \underline{\hspace{1cm}} \end{array}$$

Teacher prompt: There can be more than one good strategy. Ask: “Why did you choose that one?”

1.11 Addition Fact Practice: More Practice

I can add within 20.

1  Solve each fact. Use count on, doubles, or make a ten.

$8+3=$

$7+7=$

$9+5=$

$12+2=$

$6+6=$

$8+7=$

$4+9=$

$15+3=$

$5+6=$

$9+8=$

$2+14=$

$8+8=$

$7+4=$

$9+9=$

$3+13=$

$6+8=$

$10+7=$

$5+7=$

$9+2=$

$4+4=$

Teacher prompt: Use this page for fluency practice. Students can circle any facts that were hard and practice them again.



Addition Strategies Check

Show what you know!

1 Count on.

$$13 + 3 = \underline{\hspace{2cm}}$$

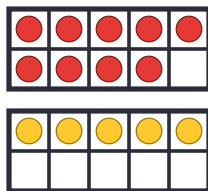
$$2 + 9 = \underline{\hspace{2cm}}$$

2 Doubles and doubles plus one.

$$7 + 7 = \underline{\hspace{2cm}}$$

$$7 + 8 = \underline{\hspace{2cm}}$$

3 Make a ten.



$$9 + 5 = 10 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

4 Add three numbers.

$$6 + 4 + 5 = \underline{\hspace{2cm}}$$

$$3 + 3 + 8 = \underline{\hspace{2cm}}$$

Teacher prompt: Students work on their own. Record scores and reteach any lesson where students miss items.

NUMERACY FIRST · FIRST GRADE

Pretest

Give this test at the start of the school year. The Pretest and the Posttest have the same items, so the two scores can be compared directly to measure growth.

Student _____

Teacher _____

Date _____

Giving the test: Work with small groups or one student at a time. Read every direction aloud. Items marked with an ear are read by the teacher. Page 1 includes oral counting items that the teacher records while listening to the student. Do not teach or correct during the test. Score with the Answer Key at the end of this section.

Section	Points	Score
1. Numbers to 120 and Counting by Tens	14	
2. Addition Strategies	10	
3. Subtraction Strategies	10	
4. Part-Whole and the Equal Sign	8	
5. Place Value	10	
6. Adding and Subtracting to 100	8	
7. Measurement, Time, and Data	9	
8. Shapes and Fractions	7	
Total	76	

Pretest Score

_____ / 76
_____ %

PRE 1. Numbers to 120 and Counting by Tens

Page score: ____ / 14

1 Teacher records. The student counts out loud.

____ / 7

a. Count by ones starting at 1. Student reaches: ☐ 30 ☐ 60 ☐ 90 ☐ 120 (1 point each)

b. Count by tens to 120. ☐ Yes

c. Count back from 25 to 15. ☐ Yes

d. Count by tens starting at 6 (6, 16, 26 ... 116). ☐ Yes

2 Write the missing numbers.

____ / 4

51	52		54	55	56	57		59	60
61	62	63		65	66		68	69	70

3 Listen. Write the number you hear.

____ / 2

a	b
_____	_____
-----	-----
_____	_____

4 Count by tens. Write the missing number.

____ / 1

4	14		34	44	54
---	----	--	----	----	----

Teacher prompt: For item 3, say each number twice: a. 47 b. 106

PRE 2. Addition Strategies

Page score: ____ / 10

1  Add.

____ / 8

$$8+3=$$

$$2+9=$$

$$6+6=$$

$$7+8=$$

$$9+5=$$

$$8+6=$$

$$13+4=$$

$$5+5=$$

2  Add three numbers.

____ / 2

$$4+6+7=$$

$$3+3+8=$$

PRE 3. Subtraction Strategies

Page score: ____ / 10

1  Subtract.

____ / 8

$$12 - 3 = \underline{\hspace{1cm}}$$

$$15 - 2 = \underline{\hspace{1cm}}$$

$$14 - 7 = \underline{\hspace{1cm}}$$

$$13 - 8 = \underline{\hspace{1cm}}$$

$$16 - 9 = \underline{\hspace{1cm}}$$

$$11 - 4 = \underline{\hspace{1cm}}$$

$$18 - 9 = \underline{\hspace{1cm}}$$

$$10 - 6 = \underline{\hspace{1cm}}$$

2  Find the missing number.

____ / 2

$$9 + \square = 15$$

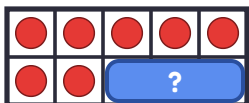
$$7 + \square = 12$$

PRE 4. Part-Whole and the Equal Sign

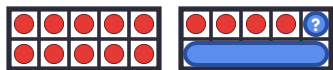
Page score: ____ / 8

1  Find the missing part. Make both sides equal.

____ / 4



How many are covered?



How many are covered?

$$5+3=\square+2$$

$$6+4=5+\square$$

2  True or False?

____ / 2

$$7 + 2 = 9$$

True False

$$5 + 4 = 3 + 5$$

True False

3  Find the missing number.

____ / 2

$$8 + \square = 14$$

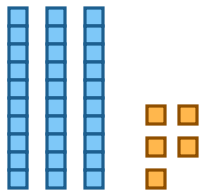
$$17 - \square = 9$$

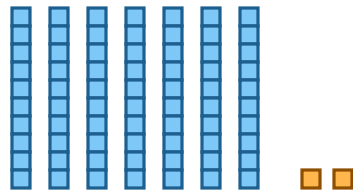
PRE 5. Place Value

Page score: ____ / 10

1 Write the number.

____ / 2





2 Write as tens plus ones.

____ / 2

$$48 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$$

$$91 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$$

3 Write >, <, or =.

____ / 3

$$46 \bigcirc 64 \quad 72 \bigcirc 70 \quad 55 \bigcirc 55$$

4 10 less and 10 more.

____ / 3



10 more than 38 is _____

PRE 6. Adding and Subtracting to 100

Page score: ____ / 8

1  Add or subtract.

____ / 8

$$\begin{array}{r} \text{T} \quad \text{O} \\ 30 \\ + 40 \\ \hline \square \square \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 25 \\ + 30 \\ \hline \square \square \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 43 \\ + \quad 5 \\ \hline \square \square \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 38 \\ + \quad 6 \\ \hline \square \square \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 47 \\ + \quad 9 \\ \hline \square \square \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 80 \\ - 50 \\ \hline \square \square \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 90 \\ - 30 \\ \hline \square \square \end{array}$$

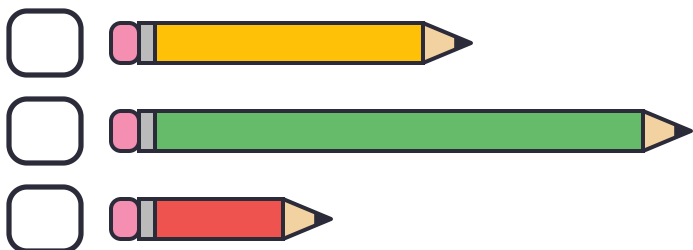
$$\begin{array}{r} \text{T} \quad \text{O} \\ 56 \\ + 20 \\ \hline \square \square \end{array}$$

PRE 7. Measurement, Time, and Data

Page score: ____ / 9

1 Write 1, 2, 3 from shortest to longest.

____ / 1



2 How long is the pencil?

____ / 1



about _____ cubes

3 Write the time.

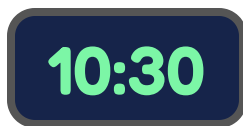
____ / 3



_____ o'clock



half past _____



Circle: 10 o'clock
half past 10

4 Read the tally chart.

____ / 4

Cats



Dogs



Fish



How many like dogs? _____

How many more dogs than cats? _____

How many in all? _____

Which has the fewest? _____

PRE 8. Shapes and Fractions

Page score: ____ / 7

1  Is it a triangle? Circle yes or no. ____ / 2

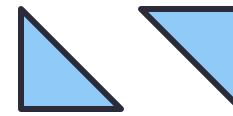


yes no



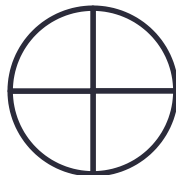
yes no

2  What new shape do they make? ____ / 1

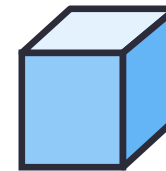


square circle hexagon

3  Circle halves. Circle fourths. Color one fourth. ____ / 3



4  How many flat faces does a cube have? ____ / 1



Teacher prompt: Item 3: students circle the shape cut in halves (rectangle), circle the shape cut in fourths (circle), and color one fourth of the circle.

NUMERACY FIRST · FIRST GRADE

Posttest

Give this test at the end of the school year. The Pretest and the Posttest have the same items, so the two scores can be compared directly to measure growth.

Student _____

Teacher _____

Date _____

Giving the test: Work with small groups or one student at a time. Read every direction aloud. Items marked with an ear are read by the teacher. Page 1 includes oral counting items that the teacher records while listening to the student. Do not teach or correct during the test. Score with the Answer Key at the end of this section.

Section	Points	Score
1. Numbers to 120 and Counting by Tens	14	
2. Addition Strategies	10	
3. Subtraction Strategies	10	
4. Part-Whole and the Equal Sign	8	
5. Place Value	10	
6. Adding and Subtracting to 100	8	
7. Measurement, Time, and Data	9	
8. Shapes and Fractions	7	
Total	76	

Posttest Score

_____ / 76
_____ %

POST 1. Numbers to 120 and Counting by Tens

Page score: ____ / 14

1 Teacher records. The student counts out loud.

____ / 7

a. Count by ones starting at 1. Student reaches: ☐ 30 ☐ 60 ☐ 90 ☐ 120 (1 point each)

b. Count by tens to 120. ☐ Yes

c. Count back from 25 to 15. ☐ Yes

d. Count by tens starting at 6 (6, 16, 26 ... 116). ☐ Yes

2 Write the missing numbers.

____ / 4

51	52		54	55	56	57		59	60
61	62	63		65	66		68	69	70

3 Listen. Write the number you hear.

____ / 2

a	b
_____	_____
-----	-----
_____	_____

4 Count by tens. Write the missing number.

____ / 1

4	14		34	44	54
---	----	--	----	----	----

Teacher prompt: For item 3, say each number twice: a. 47 b. 106

POST 2. Addition Strategies

Page score: ____ / 10

1  Add.

____ / 8

$$8+3=$$

$$2+9=$$

$$6+6=$$

$$7+8=$$

$$9+5=$$

$$8+6=$$

$$13+4=$$

$$5+5=$$

2  Add three numbers.

____ / 2

$$4+6+7=$$

$$3+3+8=$$

POST 3. Subtraction Strategies

Page score: ____ / 10

1  Subtract.

____ / 8

$$12 - 3 = \underline{\hspace{1cm}}$$

$$15 - 2 = \underline{\hspace{1cm}}$$

$$14 - 7 = \underline{\hspace{1cm}}$$

$$13 - 8 = \underline{\hspace{1cm}}$$

$$16 - 9 = \underline{\hspace{1cm}}$$

$$11 - 4 = \underline{\hspace{1cm}}$$

$$18 - 9 = \underline{\hspace{1cm}}$$

$$10 - 6 = \underline{\hspace{1cm}}$$

2  Find the missing number.

____ / 2

$$9 + \square = 15$$

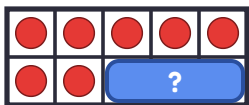
$$7 + \square = 12$$

POST 4. Part-Whole and the Equal Sign

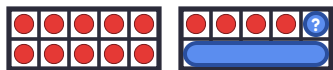
Page score: ____ / 8

1 Find the missing part. Make both sides equal.

____ / 4



How many are covered?



How many are covered?

$$5+3=\square+2$$

$$6+4=5+\square$$

2 True or False?

____ / 2

$$7+2=9$$

True False

$$5+4=3+5$$

True False

3 Find the missing number.

____ / 2

$$8+\square=14$$

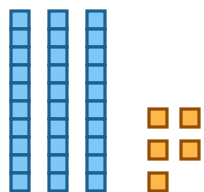
$$17-\square=9$$

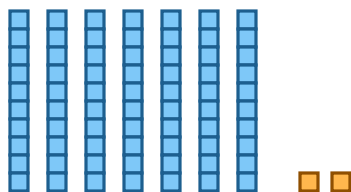
POST 5. Place Value

Page score: ____ / 10

1 Write the number.

____ / 2





2 Write as tens plus ones.

____ / 2

$$48 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$$

$$91 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$$

3 Write >, <, or =.

____ / 3

$$46 \bigcirc 64 \quad 72 \bigcirc 70 \quad 55 \bigcirc 55$$

4 10 less and 10 more.

____ / 3



10 more than 38 is _____

POST 6. Adding and Subtracting to 100

Page score: ____ / 8

1  Add or subtract.

____ / 8

$$\begin{array}{r} \text{T} \quad \text{O} \\ 30 \\ + 40 \\ \hline \square \square \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 25 \\ + 30 \\ \hline \square \square \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 43 \\ + \quad 5 \\ \hline \square \square \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 38 \\ + \quad 6 \\ \hline \square \square \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 47 \\ + \quad 9 \\ \hline \square \square \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 80 \\ - 50 \\ \hline \square \square \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 90 \\ - 30 \\ \hline \square \square \end{array}$$

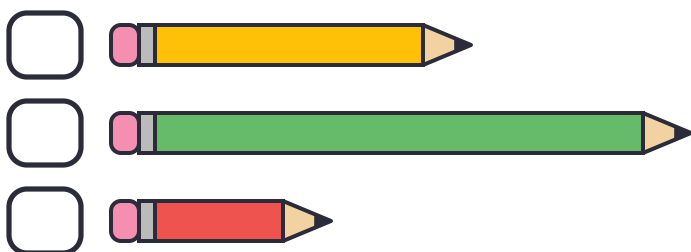
$$\begin{array}{r} \text{T} \quad \text{O} \\ 56 \\ + 20 \\ \hline \square \square \end{array}$$

POST 7. Measurement, Time, and Data

Page score: ____ / 9

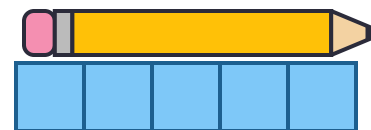
1 Write 1, 2, 3 from shortest to longest.

____ / 1



2 How long is the pencil?

____ / 1



about _____ cubes

3 Write the time.

____ / 3



_____ o'clock



half past _____



Circle: 10 o'clock
half past 10

4 Read the tally chart.

____ / 4

Cats



Dogs



Fish



How many like dogs? _____

How many more dogs than cats? _____

How many in all? _____

Which has the fewest? _____

POST 8. Shapes and Fractions

Page score: ____ / 7

1  Is it a triangle? Circle yes or no. ____ / 2



yes no



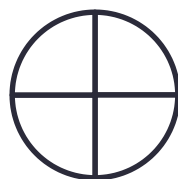
yes no

2  What new shape do they make? ____ / 1

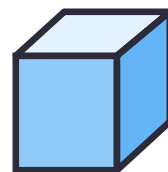


square circle hexagon

3  Circle halves. Circle fourths. Color one fourth. ____ / 3



4  How many flat faces does a cube have? ____ / 1



Teacher prompt: Item 3: students circle the shape cut in halves (rectangle), circle the shape cut in fourths (circle), and color one fourth of the circle.

+nc Name: _____



Pre/Post Score Record

Total possible: 76 points

Student _____ Pretest date _____ Posttest date _____

Section	Points possible	Pretest	Posttest	Growth (Post – Pre)
1. Numbers to 120 and Counting by Tens	14			
2. Addition Strategies	10			
3. Subtraction Strategies	10			
4. Part-Whole and the Equal Sign	8			
5. Place Value	10			
6. Adding and Subtracting to 100	8			
7. Measurement, Time, and Data	9			
8. Shapes and Fractions	7			
Total	76			
Percent (score ÷ 76 × 100)	100%			

Growth shows what the student learned this year. Sections with low posttest scores show which units to review.



Pretest and Posttest Answer Key

One point per answer unless noted.

1. Numbers to 120 and Counting by Tens

- Oral: 1 point for each level reached (30, 60, 90, 120) + 1 for tens to 120 + 1 for counting back 25 to 15.
- Chart: 53, 58, 64, 67
- Dictation: 47, 106
- Oral d: 6, 16, 26 ... 116 (1 point)
- Count by tens: 24

2. Addition Strategies

- Add: 11, 11, 12, 15, 14, 14, 17, 10
- Three numbers: 17, 14

3. Subtraction Strategies

- Subtract: 9, 13, 7, 5, 7, 7, 9, 4
- Missing: 6, 5

4. Part-Whole and Equal Sign

- Covered: 3 (ten frame), 6 (twenty frame); make equal: 6, 5
- True or False: True, False
- Missing: 6, 8

5. Place Value

- Models: 35, 72
- $48 = 40 + 8$; $91 = 90 + 1$
- $46 < 64$; $72 > 70$; $55 = 55$
- 10 less 54, 10 more 74; 10 more than 38 is 48

6. Adding and Subtracting to 100

- 70, 55, 48, 44, 56, 30, 60, 76

7. Measurement, Time, Data

- Order: yellow 2, green 3, red 1
- About 5 cubes
- 7 o'clock; half past 2; half past 10
- Dogs 9; 3 more; 18 in all; fish

8. Shapes and Fractions

- Triangle: no (open), yes
- Square
- Circle the rectangle (halves) and circle the circle (fourths); 1 of 4 parts colored
- A cube has 6 flat faces