Lesson 17

Note: (You will need a bag and 9 crayons or Board Displays slide [17:2A] for exercise 2, steps c and d.)

EXERCISE 1: ROTE COUNTING—*Count to 15*

a. I'm going to get 10 going and count to 13. Tennn, 11, 12, 13.
• Your turn: Get 10 going. *Tennn.* Count. (Tap 3.) *11, 12, 13.*
   (Repeat step a until firm.)
b. Now I'm going to get 10 going and count to 14.
• Say 14. (Signal.) *14.*
c. Listen: Tennn, 11, 12, 13, 14. Listen again: Tennn, 11, 12, 13, 14.
• Say that part with me. **Tennn.** (Tap 4.) **11, 12, 13, 14.**
   (Repeat step c until firm.)
d. Your turn to get 10 going and count to 14. Get it going. *Tennn.* Count. (Tap 4.) *11, 12, 13, 14.*
   (Repeat step d until firm.)

────── **INDIVIDUAL TURNS** ──────

(Call on individual children to get 10 going and count to 14.) *Tennn, 11, 12, 13, 14.*

EXERCISE 2: COUNTING EVENTS

a. I'll tap. You'll count each time I tap.
   (Tap) *1,* (tap) *2,* (pause) (tap) *3,* (pause) (tap) *4,* (tap) *5,* (tap) *6,* (tap) *7,* (pause) (tap) *8,* (tap) *9.*
   (Repeat until firm.)
• How many times did I tap? (Signal.) *9.*
b. I'll tap. You'll count each time I tap.
   (Tap) *1,* (pause) (tap) *2,* (tap) *3,* (pause) (tap) *4,* (pause) (tap) *5,* (tap) *6,* (tap) *7.*
   (Repeat until firm.)
• How many times did I tap? (Signal.) *7.*
c. Now I'm going to drop crayons into a bag. You'll count them.
   (Hold 9 crayons above bag.)
• Get ready. (Drop crayons.) *1, 2, 3, 4, 5, 6, 7, 8, 9.*
   (Repeat until firm.)
• How many crayons are in the bag? (Signal.) *9.*
   Yes, 9.
d. Let's see if you're right. (Quickly remove crayons and arrange them in a row.)
• I'll touch. You'll count. Get ready. (Touch crayons.) *1, 2, 3, 4, 5, 6, 7, 8, 9.*
• How many crayons were in the bag? (Touch.) *9.*

$$= \quad 5 \quad 6 \quad \square \quad 7 \quad +$$

EXERCISE 3: SYMBOL IDENTIFICATION—*Introduction of 3*

a. (Display page and point to top row.)   [17:3A]
   You'll tell me the names for all the things in this row when I touch under them.
• (Point to **=**.) Get ready. (Touch.) *Equals.*
• (Point to **5**.) Get ready. (Touch.) *5.*
• (Repeat for remaining symbols.) *6, box, 7, plus.*
b. Let's do those again. You'll tell me the name for each thing when I touch under it. I'll start at this end.
• (Point to **+**.) Get ready. (Touch.) *Plus.*
• (Repeat for remaining symbols.) *7, box, 6, 5, equals.*
   (Repeat steps a and b until firm.)

c. (Point to ③.) Here's a new number. This is 3.
• What number? (Touch.) *3.*
d. (Point to first **3**.) Is this 3? (Touch.) *Yes.*
• What is it? (Touch.) *3.*
e. (Point to **5**.) Is this 3? (Touch.) *No.*
• What is it? (Touch.) *5.*
f. (Repeat step e for the following:)

(Point to __.)	Is this 3?	What is it?
+	No	Plus
6	No	6
3	Yes	3
4	No	4

(Repeat symbols that were not firm.)

$$\boxed{3}$$

$$3 \quad \mathbf{5} \quad + \quad 6 \quad 3 \quad 4$$

EXERCISE 4: NEXT NUMBER

a. I'm going to count, and you're going to tell me the next number.
- Listen: 10, 11, tweeelve. What's the next number? (Signal.) *13.*
- Listen: 7, eieieight. What's the next number? (Signal.) *9.*
- Listen: 9, 10, elevennn. What's the next number? (Signal.) *12.*
- Listen: 8, niiine. What's the next number? (Signal.) *10.*
- Listen: 5, siiix. What's the next number? (Signal.) *7.*
- Listen: 6, sevennn. What's the next number? (Signal.) *8.*
- Listen: 8, 9, tennn. What's the next number? (Signal.) *11.*
- (Repeat step a until firm.)

b. Let's do it again, but this time I'm going to make it even harder.
- Listen: sevennn. What's the next number? (Signal.) *8.*
- Listen: 11, tweeelve. What's the next number? (Signal.) *13.*
- Listen: niiine. What's the next number? (Signal.) *10.*
- Listen: 10, elevennn. What's the next number? (Signal.) *12.*
- Listen: eieieight. What's the next number? (Signal.) *9.*
- Listen: 9, tennn. What's the next number? (Signal.) *11.*
- Listen: fiiive. What's the next number? (Signal.) *6.*
- Listen: fouuur. What's the next number? (Signal.) *5.*
- Listen: siiix. What's the next number? (Signal.) *7.*
- (Repeat step b until firm.)

INDIVIDUAL TURNS
(Call on individual children to perform one or two of the following tasks.)

- Listen: 7, eieieight. What's the next number? (Call on a child.) *9.*
- Listen: fiiive. What's the next number? (Call on a child.) *6.*
- Listen: 9, tennn. What's the next number? (Call on a child.) *11.*
- Listen: 11, tweeelve. What's the next number? (Call on a child.) *13.*
- Listen: 6, sevennn. What's the next number? (Call on a child.) *8.*

EXERCISE 5: LINES FOR NUMERALS

a. A number tells you how many lines to make.
- What does a number tell you? (Signal.) *How many lines to make.*
- (Repeat step a until firm.)

b. If the number is 12, how many lines do you make? (Signal.) *12.*
- If the number is zero, how many lines do you make? (Signal.) *Zero.*
- If the number is 9, how many lines do you make? (Signal.) *9.*

c. Listen: A box is not a number, so it doesn't tell how many lines to make.
- Is a box a number? (Signal.) *No.*
- Does a box tell how many lines to make? (Signal.) *No.*

d. Is 10 a number? (Signal.) *Yes.*
Does 10 tell how many lines to make? (Signal.) *Yes.*
How many? (Signal.) *10.*

e. Is 3 a number? (Signal.) *Yes.*
Does 3 tell how many lines to make? (Signal.) *Yes.*
How many? (Signal.) *3.*

f. (Write on the board:)   [17:5A]

> 5 □ □

One of these is a number, and some are boxes. If it is a number, you'll tell me what number it is.
- (Point to **5.**) What's this? (Touch.) *5.*
- Does 5 tell how many lines to make? (Touch.) *Yes.*
- How many? (Touch.) *5.*

g. (Point to first □.) What's this? (Touch.) *(A) box.*
- Does a box tell how many lines to make? (Touch.) *No.*

h. (Point to next □.) What's this? (Touch.) *(A) box.*
- Does a box tell how many lines to make? (Touch.) *No.*

i. (Point to **5.**) I'm going to make lines for this number.
- How many lines? (Touch.) *5.*
- Count the lines and tell me when to stop. Get ready. (Make lines under 5.) *1, 2, 3, 4, 5, stop.*
(Teacher reference:)   [17:5B1–5]

> 5 □ □
> |||||

We made the lines for the number 5.

j. (Point to boxes.) What are these? (Touch.) *Boxes.*
- Do they tell how many lines to make? (Touch.) *No.*
- So I don't make lines for them.

7 5 3

EXERCISE 6: SYMBOL IDENTIFICATION

a. (Display page.) [17:6A]
   One of these numbers is 3.
- (Point to **3**.) Here's the new number. What number? (Touch.) *3.*
b. (Point to **7**.) Is this 3? (Touch.) *No.*
- What is it? (Touch.) *7.*
   Yes, 7.
- (Point to **5**.) Is this 3? (Touch.) *No.*
- What is it? (Touch.) *5.*
   Yes, 5.
- (Point to **3**.) Is this 3? (Touch.) *Yes.*
c. You'll tell me the names again when I touch under each thing.
- (Point to **7**.) Get ready. (Touch.) *7.*
- (Point to **5**.) Get ready. (Touch.) *5.*
- (Point to **3**.) Get ready. (Touch.) *3.*
   (Repeat step c until firm.)

EXERCISE 7: COUNTING FROM NUMBERS

a. I'm going to get numbers going and say the next number.
   My turn to get 6 going and say the next number. Siiix. (Signal.) *7.*
- My turn to get 4 going and say the next number. Fouuur. (Signal.) *5.*
- My turn to get 7 going and say the next number. Sevennn. (Signal.) *8.*
- Your turn to get 7 going and say the next number. *Sevennn.* (Signal.) *8.*
- Get 4 going. *Fouuur.* Next number. (Signal.) *5.*
- Get 6 going. *Siiix.* Next number. (Signal.) *7.*
   (Repeat step a until firm.)
b. This time we're going to get numbers going and count.
- My turn to get 8 going and count. Eieieight, 9, 10, 11.
- Your turn to get it going and count. Get 8 going. *Eieieight.* Count. (Tap 3.) *9, 10, 11.*
c. My turn to get 5 going and count. Fiiive, 6, 7, 8.
- Your turn to get it going and count. Get 5 going. *Fiiive.* Count. (Tap 3.) *6, 7, 8.*
d. Get 7 going. *Sevennn.* Count. (Tap 3.) *8, 9, 10.*
- Get 2 going. *Twooo.* Count. (Tap 3.) *3, 4, 5.*
   (Repeat step d until firm.)

━━━━━ **INDIVIDUAL TURNS** ━━━━━
(Call on individual children to perform one of the following tasks.)

- Get 7 going and count. *Sevennn.* (Tap 3.) *8, 9, 10.*
- Get 2 going and count. *Twooo.* (Tap 3.) *3, 4, 5.*

+

EXERCISE 8: PLUS

a. (Display page and point to **+**.) [17:8A]
- Everybody, what is this? (Touch.) *Plus.*
   Yes, plus.
b. When you plus, you get more. What do you do when you plus? (Signal.) *(You) get more.*

c. If you plus 1, you get 1 more.
- What happens if you plus 1? (Signal.) *(You) get 1 more.*
- What happens if you plus 5? (Signal.) *(You) get 5 more.*
- What happens if you plus 15? (Signal.) *(You) get 15 more.*
- What happens if you plus 7? (Signal.) *(You) get 7 more.*
   (Repeat step c until firm.)
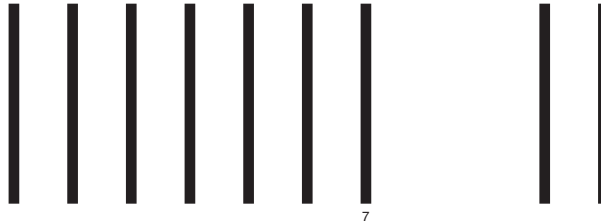
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EXERCISE 9: COUNTING TWO GROUPS

a. (Display page and point to lines.) [17:9A]
Here are two groups of lines. You're going to count the lines in each group.
• (Point to **IIIIIII.**) Count the lines in this group. Get ready. (Touch lines.) *1, 2, 3, 4, 5, 6, 7.*
• How many lines are in this group? (Touch.) *7.*
b. (Point to **II.**) Count the lines in this group. Get ready. (Touch lines.) *1, 2.*
• How many lines are in this group? (Touch.) *2.*
c. (Point to **IIIIIII.**) I'm going to count the lines in both groups. (Touch lines in first group.) *1, 2, 3, 4, 5, 6, sevennn.* (Touch lines in second group.) *8, 9.*
• This time I'll count the first group. Then you'll keep on counting. (Touch lines in first group.) *1, 2, 3, 4, 5, 6, sevennn.* (Touch lines in second group.) *8, 9.* (Repeat until firm.)
• How many lines in both groups? (Signal.) *9.*

d. You'll do the hard part again. (Touch line 7.) This is line 7.
• Which line? (Touch.) *7.*
You'll get it going and count the rest of the lines.
• Get 7 going. *Sevennn.* (Touch lines in second group.) *8, 9.*
e. Let's do the hard part again.
I'll touch line 7. (Touch.)
• Get 7 going. *Sevennn.* (Touch lines in second group.) *8, 9.* (Repeat until firm.)
How many lines are in both groups? (Signal.) *9.*

EXERCISE 10: MAKING LINES

a. (Write on the board:) [17:10A]

I'm going to count to 3 and make a line for each number I count. For each number, I start at the big ball and make a line down. Watch.
• (Put chalk on first big ball.) One. (Make line and put chalk on next big ball.) Two. (Make line and put chalk on next big ball.) Three. (Make line.)
• (Point to lines.) How many lines did I make? (Touch.) *3.*
• After I made each line, did you see how quickly I got ready to make the next line? (Children respond.)
b. (Open workbooks to Lesson 17 and distribute to children.)
• Now **you're** going to make a line for each number I count. (Hold up worksheet and point to snake.) ☞

c. Touch the snake on your worksheet. ✔
• Touch the big ball next to the snake. ✔
That's where you'll start your first line.
• After I say 1, you'll make the line for that ball. What will you do after I say 1? (Signal.) *Make the line for that ball.*
• Will you make the line for that ball before I say 1? (Signal.) *No.* That's right. After I say 1, you'll start at the big ball and make the line down.
d. Touch the ball where you'll start your next line. ✔
• After I say 2, you'll make the line for that ball. What will you do after I say 2? (Signal.) *Make the line for that ball.*
• Will you make the line for that ball before I say 2? (Signal.) *No.* That's right. After I say 2, you'll start at the big ball and make the line down.
e. Touch the ball where you'll start your next line. ✔
• After I say 3, you'll make the line for that ball. What will you do after I say 3? (Signal.) *Make the line for that ball.*
• Will you make the line for that ball before I say 3? (Signal.) *No.* That's right. After I say 3, you'll start at the big ball and make the line down. (Repeat steps c through e until firm.)
f. Now put your pencil on the ball where you'll start your first line. ✔
• I'm going to count to 3. You'll make a line after I say each number. Get ready. One. (Children make a line.) Two. (Children make a line.) Three. (Children make a line.)
g. (If children did not make mistakes on step f, go to Exercise 11.)
• (If children made mistakes on step f, repeat steps c through f with the dotted lines next to the **spoon.**)
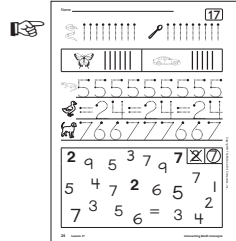
EXERCISE 11: COUNTING LINES

a. Touch the butterfly on your worksheet. ✔
   (Teacher reference:)

   You're going to count the group of lines next to the butterfly.
   • Put your finger over the first line. ✔
   • Touch and count the lines. Get ready. (Tap 6.) *1, 2, 3, 4, 5, 6.*
     (Repeat until firm.)
   • How many lines in that group? (Signal.) *6.*
b. Touch the car. ✔
   You're going to count the group of lines next to the car.
   • Put your finger over the first line. ✔
   • Touch and count the lines. Get ready. (Tap 5.) *1, 2, 3, 4, 5.*
     (Repeat until firm.)
   • How many lines in that group? (Signal.) *5.*

   ──────── INDIVIDUAL TURNS ────────
   (Call on individual children to perform one of the following tasks.)

   • Touch and count the group of lines next to the butterfly. *1, 2, 3, 4, 5, 6.*
     How many lines? *6.*
   • Touch and count the group of lines next to the car. *1, 2, 3, 4, 5.*
     How many lines? *5.*

EXERCISE 12: SYMBOL WRITING

a. Touch the alligator on your worksheet. ✔
   (Teacher reference:)
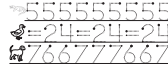
   What's the number next to the alligator? (Signal.) *5.*
   • Complete the row of 5s.
     (Observe children and give feedback.)
b. Touch the duck. ✔
   • Touch what's next to the duck. ✔
   • Everybody, what are you touching? (Signal.) *Equals.*
   • What's the number next to the equals? (Signal.) *2.*
   • What's next to the 2? (Signal.) *4.*
     Yes, 4.
c. Touch the dog. ✔
   • Everybody, what's next to the dog? (Signal.) *7.*
   • What's next to the 7? (Signal.) *6.*
     Yes, 6.
d. Complete the rows.
   (Observe children and give feedback.)
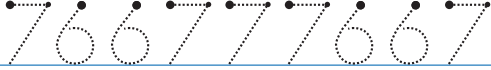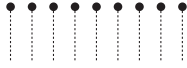
EXERCISE 13: CROSS-OUT/CIRCLE GAME

a. Touch the cross-out/circle game on your worksheet. ✔
   (Teacher reference:)
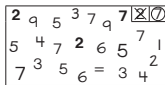
   • You are going to cross out some things and circle other things.
b. Touch the thing that's crossed out. ✔
   • What are you going to cross out? (Signal.) *2.*
c. Touch the thing that's circled. ✔
   • What are you going to circle? (Signal.) *7.*
     (Repeat steps b and c until firm.)
d. Again, what are you going to cross out? (Signal.) *2.*
   • Cross out all the 2s.
     (Observe children and give feedback.)
e. You crossed out the 2s. Now you have to do something else.
   • What do you have to do now? (Call on a child. Idea: *Circle all the 7s.*)
     You have to circle all the 7s. Do it.
     (Observe children and give feedback.)

Name _____

5 5 5 5 5 5 5 5 5 5

= 2 4 = 2 4 = 2 4

7 6 6 7 7 7 7 6 6 7

2 9 5 3 7 9 **7** ☒ ⑦

5 4 7 **2** 6 5 7

7 3 5 6 = 3 1

2 4

Connecting Math Concepts

Lesson 89

EXERCISE 1: SHAPES

a. You learned another name for a box. What's another name for a box? (Signal.) *A rectangle.*

b. (Display page and touch either triangle.) [89:1A]
This shape has three sides. It's a triangle. What is this shape? (Touch.) *A triangle.*

c. (Point to objects.) You're going to tell me what these things are.

• (Point to first circle.) What is this shape? (Touch.) *(A) circle.*

d. (Point to first triangle.) What is this shape? (Touch.) *(A) triangle.*

• How many sides does a triangle have? (Touch.) *Three.*

e. (Point to rectangle.) What is this shape? (Touch.) *A rectangle.*

• (Repeat for remaining objects.) *A triangle, a square, a circle.*

━━━━━━ INDIVIDUAL TURNS ━━━━━━

(Call on individual children to identify one or two shapes.)
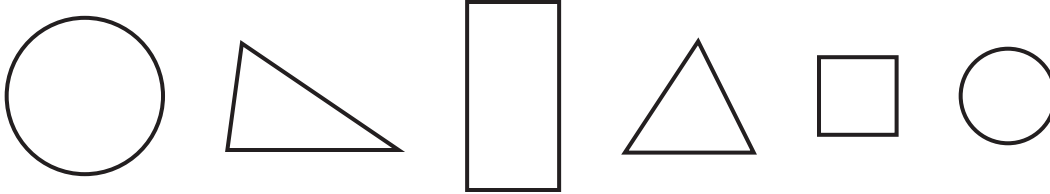

$$1 + 16 =$$

$$5 + 80 = \qquad 1 + 7 =$$

EXERCISE 2: TURN-AROUND EQUATIONS

a. (Display page and point to problems.) [89:2A]
You don't know the answer to these problems, but you can figure out the answers by saying the turn-around equations.

• (Point to **1 + 16**.) Tell me the turn-around for 1 plus 16. Get ready. (Signal.) *16 plus 1.*

• What does 16 plus 1 equal? (Signal.) *17.*
So what does 1 plus 16 equal? (Signal.) *17.*

• Say the equation for 1 plus 16. (Signal.) *1 plus 16 equals 17.*
(Repeat until firm.)

b. (Point to **5 + 80**.) Tell me the turn-around for 5 plus 80. Get ready. (Signal.) *80 plus 5.*

• What does 80 plus 5 equal? (Signal.) *85.*
So what does 5 plus 80 equal? (Signal.) *85.*

• Say the equation for 5 plus 80. (Signal.) *5 plus 80 equals 85.*

c. (Point to **1 + 7**.) Tell me the turn-around for 1 plus 7. Get ready. (Signal.) *7 plus 1.*

• What does 7 plus 1 equal? (Signal.) *8.*
So what does 1 plus 7 equal? (Signal.) *8.*

• Say the equation for 1 plus 7. (Signal.) *1 plus 7 equals 8.*
(Repeat steps b and c that were not firm.)
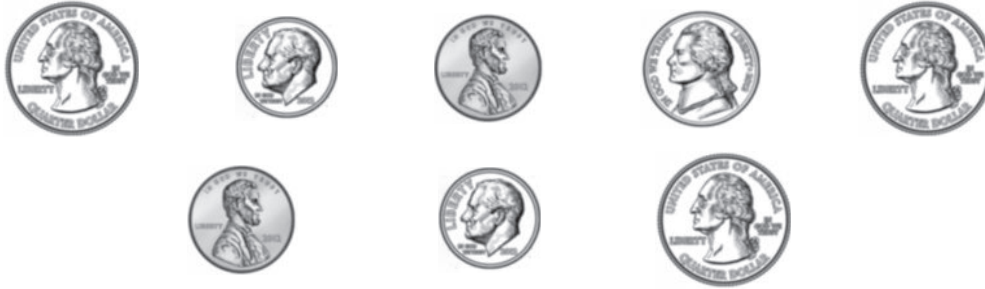
Exercise 3: Coins—*Identifying Quarters*

a. (Display page and point to quarter in box.) [89:3A]
• This coin is a **quarter.** What kind of coin is this? (Touch.) *A quarter.*
• (Point to first row.) I'll point to coins. You'll tell me what they are when I touch them.
• (Point to first quarter.) What is this? (Touch.) *(A) quarter.*
• (Point to first dime.) What is this? (Touch.) *(A) dime.*
• (Repeat for remaining coins.) *A penny, a nickel, a quarter, a penny, a dime, a quarter.*
  (Repeat until firm.)

Exercise 4: Counting Backward

a. (Display page and point to number line.) [89:4A]
  You're going to count backward on this number line.
• (Point to **5**.) Count backward with me. Get ready. (Touch symbols.)
  5, 4, 3, 2, 1.
  (Repeat until firm.)
b. All by yourself. I'll touch the numbers. You count backward.
• (Point to **5**.) Get ready. (Touch symbols.) *5, 4, 3, 2, 1.*
  (Repeat step b until firm.)

c. (Stop displaying page.) I can count backward from 3 without looking. Listen: 3, 2, 1.
• Count backward from 3 with me. Get ready. (Count with children:)
  3, 2, 1.
• All by yourself. Count backward from 3. Get ready. (Tap 3.) *3, 2, 1.*
  (Repeat until firm.)

──── **Individual Turns** ────
(Call on individual children to count backward from 3.)

134   103   150
172   113

Exercise 5: Symbol Identification—
Three-Part Numbers

a. (Display page and point to numbers.)   [89:5A]
These three-part numbers don't have an underlined part.
Remember, you say **one hundred** for the 1.
• What do you say for the 1? (Signal.) *One hundred.*
Then you read the rest of the number.

b. (Point to **134.**) What do you say for the 1? (Touch.) *One hundred.*
• What do you say for the other part? (Touch.) *34.*
• Say the whole number. (Touch.) *One hundred 34.*

c. (Point to **103.**) What do you say for the 1? (Touch.) *One hundred.*
• What do you say for the other part? (Touch.) *3.*
• Say the whole number. (Touch.) *One hundred 3.*

d. For the rest of the numbers, you'll read the whole number.
• (Point to **150.**) What's the whole number? (Touch.) *One hundred 50.*
(To correct:)
• (Point to **150.**) What do you say for 1? (Touch.) *One hundred.*
• What do you say for the other part? (Touch.) *50.*
• Say the whole number. (Touch.) *One hundred 50.*
• (Point to **172.**) What number? (Touch.) *172.*
• (Point to **113.**) What number? (Touch.) *113.*
(Repeat steps b through d until firm.)

Exercise 6: Ordinal Numbers

a. (Display page and point to dog.)   [89:6A]
• Count the things in this row. Get ready. (Touch.) *1, 2, 3, 4, 5.*
• How many things are in this row? (Signal.) *5.*
• (Point to dog.) This is the first thing. What is the first thing in this row? (Touch.) *(A) dog.*
• Say **first.** (Signal.) *First.*

b. (Point to cat.) This is the **second** thing. What is the second thing in this row? (Touch.) *(A) cat.*
• Say **second.** (Signal.) *Second.*

c. (Point to boy.) This is the **third** thing. What is the third thing in this row? (Touch.) *(A) boy.*
• Say **third.** (Signal.) *Third.*

d. (Point to dog.) My turn: (Touch dog.) First. (Touch cat.) Second. (Touch boy.) Third.
• Say that with me. (Touch objects.) ***First, second, third.***
(Repeat step d until firm.)

e. What's the first thing in the row? (Signal.) *(A) dog.*
• What's the second thing in the row? (Signal.) *(A) cat.*
• What's the third thing in the row? (Signal.) *(A) boy.*
(Repeat step e until firm.)

EXERCISE 7: ADDING TWO-PART NUMBERS

a. Start with 20 and count by tens to one hundred. Get 20 going. *Twentyyy.* Count. (Tap 8.) *30, 40, 50, 60, 70, 80, 90, one hundred.*
   (Repeat step a until firm.)

b. Now you'll start with 29 and plus tens to 99. What number will you start with? (Signal.) *29.*
   • Get 29 going. *Twenty-niiine.* Plus tens. (Tap 7.) *39, 49, 59, 69, 79, 89, 99.*
   • Now you'll start with 59 and plus **ones** to 64. Get 59 going. *Fifty-niiine.* Plus ones. (Tap 5.) *60, 61, 62, 63, 64.*
   • Now you'll start with 43 and plus **ones** to 50. Get 43 going. *Forty-threee.* Plus ones. (Tap 7.) *44, 45, 46, 47, 48, 49, 50.*
   • Now start with 33 and plus **tens** to 93. Get 33 going. *Thirty-threee.* Plus tens. (Tap 6.) *43, 53, 63, 73, 83, 93.*
   (Repeat step b until firm.)

c. Today's lesson is 89. What number? (Signal.) *89.*
   • Tell me the parts of 89. Get ready. (Signal.) *8 and 9.*
   • (Distribute unopened workbooks to children.) Open your workbook to Lesson 89.
   (Observe children and give feedback.)

d. Touch the problem 59 plus 40 equals. ✔
   You'll make the counters for one of the numbers.
   • Which number will you make counters for? (Signal.) *40.*
   • Will you make Ts or lines? (Signal.) *Ts.*
   • How many Ts will you make for 40? (Signal.) *4.*

• So you'll make 4 Ts. What will you make for the problem 59 plus 40? (Signal.) *4 Ts.*

e. You'll tell me what you'll make for the rest of the problems.
   • Touch 59 plus 4. Think about how many Ts or lines you'll make. (Pause.)
   • What will you make for the problem 59 plus 4? (Signal.) *4 lines.*
   (Repeat until firm.)

f. Touch 43 plus 30. ✔
   • What will you make for the problem 43 plus 30? (Signal.) *3 Ts.*

g. Make the Ts or lines for each problem.
   (Observe children and give feedback.)
   (Teacher reference:)

   $$59+40= \quad | \quad 59+4=$$
   $$\text{T T T T} \quad | \quad \text{IIII}$$
   $$43+30=$$
   $$\text{T T T}$$

h. Touch the problem 59 plus 40 equals again. ✔
   You'll get the number going and touch and count for the Ts to figure out the answer. Remember how many you plus for each T.
   • Touch the number you'll get going. ✔
   • Get it going. *Fifty-niiine.* Count for the Ts. (Tap 4.) *69, 79, 89, 99.*
   (Repeat until firm.)
   • What's the answer? (Signal.) *99.*

i. Touch the problem 59 plus 4. ✔
   You'll get a number going and touch and count for the lines to figure out the answer.
   • Touch the number you'll get going. ✔
   • Get it going. *Fifty-niiine.* Count for the lines. (Tap 4.) *60, 61, 62, 63.*
   (Repeat until firm.)
   • What's the answer? (Signal.) *63.*

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j. Touch the problem 43 plus 30. ✔
   You'll get the number going and touch and count for the Ts to figure out the answer.
   • Touch the number you'll get going. ✔
   • Get it going. *Forty-threee.* Count for the Ts. (Tap 3.) *53, 63, 73.*
   (Repeat until firm.)
   • What's the answer? (Signal.) *73.*

k. Go back to the first problem. Touch and count to yourself for both groups and write the answer. Then work the other problems. Remember to plus one for lines and plus ten for Ts. Put your pencil down when you've completed all the equations.
   (Observe children and give feedback.)
   (Answer key:)

   $$59+40= 99 \quad | \quad 59+4= 63$$
   $$\text{T T T T} \quad | \quad \text{IIII}$$
   $$43+30= 73$$
   $$\text{T T T}$$

l. Check your work.
   • Touch and read the first equation. Get ready. (Tap 5.) *59 plus 40 equals 99.*
   • Touch and read the next equation. Get ready. (Tap 5.) *59 plus 4 equals 63.*
   • Touch and read the last equation. Get ready. (Tap 5.) *43 plus 30 equals 73.*

EXERCISE 8: COLUMN PROBLEMS

a. Find the column problem 70 plus 6 equals 76 on worksheet 89. ✔
   (Teacher reference:)

70	42	29	50	28
+ 6	− 0	+ 1	+ 3	+ 0
76	42	30	53	28

   The answers to these problems are right, but some of the answers are in the wrong place.
   • Touch 70 plus 6. ✔
   • What's the answer? (Signal.) *76.*
   • Is 76 written in the right place? (Signal.) *No.*

b. Touch 42 take away zero. ✔
   • What's the answer? (Signal.) *42.*
   • Is the answer written in the right place? (Signal.) *Yes.*

c. Touch 29 plus 1. ✔
   • What's the answer? (Signal.) *30.*
   • Is 30 written in the right place? (Signal.) *No.*

d. Touch 50 plus 3. ✔
   • What's the answer? (Signal.) *53.*
   • Is 53 written in the right place? (Signal.) *Yes.*

e. Touch 28 plus zero. ✔
   • What's the answer? (Signal.) *28.*
   • Is 28 written in the right place? (Signal.) *Yes.*

f. Your turn: Cross out the answers that are written in the wrong place. Make one line through those answers.
   (Observe children and give feedback.)
   (Answer key:)

70	42	29	50	28
+ 6	− 0	+ 1	+ 3	+ 0
~~76~~	42	~~30~~	53	28

EXERCISE 9: MORE

a. I'll say two numbers. You'll say them; then you tell me which is more.
- Listen: 180 and one hundred 8. Say 180 and 108. (Signal.) *180 and 108.*
- Which is more? (Signal.) *180.*
- Listen: 21 and 12. Say 21 and 12. (Signal.) *21 and 12.*
- Which is more? (Signal.) *21.*
- (Repeat step a until firm.)

b. I'll say two weights. You'll say them; then you tell me which is heavier.
- Listen: 63 ounces and 47 ounces. Say 63 ounces and 47 ounces. (Signal.) *63 ounces and 47 ounces.*
- Which is heavier? (Signal.) *63 ounces.*
- Listen: 29 pounds and 38 pounds. Say 29 pounds and 38 pounds. (Signal.) *29 pounds and 38 pounds.*
- Which is heavier? (Signal.) *38 pounds.*
- Listen: 17 pounds and 15 pounds. Say 17 pounds and 15 pounds. (Signal.) *17 pounds and 15 pounds.*
- Which is heavier? (Signal.) *17 pounds.*
- Listen: 19 tons and 21 tons. Say 19 tons and 21 tons. (Signal.) *19 tons and 21 tons.*
- Which is heavier? (Signal.) *21 tons.*
- (Repeat step b until firm.)

c. Touch the numbers 17 and 15 on worksheet 89. ✔
(Teacher reference:)

17 15 │ 12 21 │ 180 108

You're going to circle the numbers that are more.
- Which is more, 17 or 15? (Signal.) *17.*
d. Touch the next group of numbers. ✔
- What's the first number? (Signal.) *12.*
- What's the other number? (Signal.) *21.*
- Which is more, 12 or 21? (Signal.) *21.*
e. Touch the last group of numbers. ✔
- What's the first number? (Signal.) *180.*
- What's the other number? (Signal.) *108.*
- Which is more, 180 or 108? (Signal.) *180.*
f. Circle the number that is more in each group.
(Observe children and give feedback.)
(Answer key:)

⑰ 15 │ 12 ㉑ │ ⑱⓪ 108

EXERCISE 10: PLUS, ALGEBRA ADDITION, TAKE AWAY

a. Touch the problem 65 plus how many equals 70 on worksheet 89. ✔
(Teacher reference:)

65+☐=70 │ 8−3=☐
5+4=☐ │ 19+☐=23

Some of these problems plus, and one takes away. For some of the plus problems, you'll count and make lines to figure out the number you plus.

b. Touch and read the first problem. Get ready. (Tap 5.) *65 plus how many equals 70.*
- To work that problem, will you make lines for a number? (Signal.) *No.*
- What does that problem tell you to do? (Signal.) *Start with 65 and count to 70.*

c. Touch and read the next problem. Get ready. (Tap 5.) *8 take away 3 equals how many.*
- To work that problem, will you make lines for a number? (Signal.) *Yes.*
- What number will you make lines for? (Signal.) *8.*

d. Touch and read the next problem. Get ready. (Tap 5.) *5 plus 4 equals how many.*
- To work that problem, will you make lines for a number? (Signal.) *Yes.*
- What number will you make lines for? (Signal.) *4.*

e. Touch and read the last problem. Get ready. (Tap 5.) *19 plus how many equals 23.*
- To work that problem, will you make lines for a number? (Signal.) *No.*
- What does that problem tell you to do? (Signal.) *Start with 19 and count to 23.*
- (Repeat steps b through e until firm.)
You'll work these problems later.

EXERCISE 11: INDEPENDENT WORK

Coins

a. Turn to the other side of worksheet 89 and touch the first group of coins. ✔
You'll count the cents for each group.
- Touch the first coin. ✔
- What coin are you touching? (Signal.) *(A) nickel.*
- What number do you get going for a nickel? (Signal.) *5.*
- Get it going. *Fiiive.* Count for the pennies. (Tap 5.) *6, 7, 8, 9, 10.*
(Repeat until firm.)
- How many cents are in that group? (Signal.) *10.*
b. Touch the next group of coins. ✔
- Touch the first coin. ✔
- What coin are you touching? (Signal.) *(A) dime.*
- What do you count by for each dime? (Signal.) *10.*
- What's the other kind of coin in that group? (Signal.) *Penny.*
- Finger over the first dime. ✔
- Touch and count for the dimes. Get ready. (Tap 5.) *10, 20, 30, 40, fiftyyy.* Count for the pennies. (Tap 4.) *51, 52, 53, 54.*
(Repeat until firm.)
- How many cents are in that group? (Signal.) *54.*
Later you'll count the cents for each group again and write an equals sign and the number.
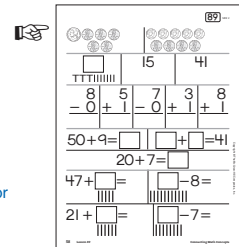
c. Touch the box with Ts and lines below it on worksheet 89. ✔
    (Teacher reference:)

    □ | I5 | 4I
    TTTIIIIIII

•   Later you'll fix each problem in this row so it has a two-part number with the right number of Ts and lines below it.

Completing Equations

d. You'll complete equations for the rest of the problems on worksheet 89 without making Ts or lines below. For some of the problems, the lines are already shown. You'll cross out lines, but you won't make lines.

e. Turn to the other side of worksheet 89 and touch the problem 65 plus how many equals 70. ✔
    You'll make lines for these problems and complete the equations.

•   Will you make lines to work any of the problems on this side of worksheet 89? (Signal.) *Yes.*

f. Your turn: Complete the equations on this side of worksheet 89. Then turn to the other side and complete all the problems.
    (Observe children and give feedback.)
    (Answers appear in the Answer Key.)

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Name _____

$$59+40=$$ $$59+4=$$

$$43+30=$$

| 70
+ 6
76 | 42
− 0
42 | 29
+ 1
30 | 50
+ 3
53 | 28
+ 0
28 |

| 17 15 | 12 21 | 180 108 |

$$65+\square=70$$ $$8-3=\square$$

$$5+4=\square$$ $$19+\square=23$$

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| □
TTTIIIIIII | I5 | 4I |

| 8
− 0 | 5
+ 1 | 7
− 0 | 3
+ 1 | 8
+ 1 |

$$50+9=\square$$ $$\square+\square=4I$$

$$20+7=\square$$

$$47+\square=$$ ||||| $$\square-8=$$ |||||||||

$$2I+\square=$$ |||||| $$\square-7=$$ ||||||||

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