

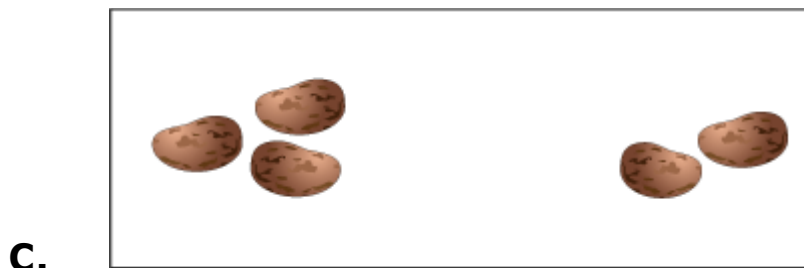
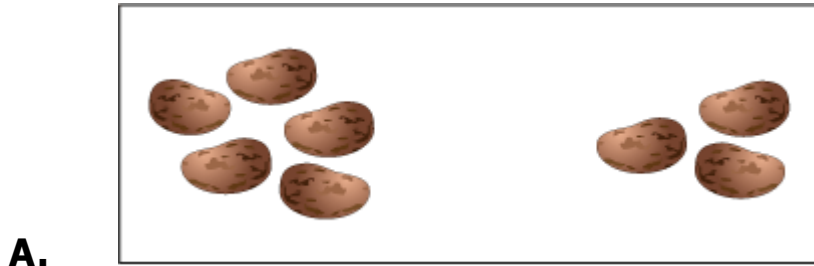


1st Grade Math



To Proficiency and
Beyond!

1) Kim has 5 dolls. The she gets 3 more dolls. Kim uses beans to find out how many dolls she has now. Which set of beans models Kim's dolls?



2) Use the pictures to answer the question.



Which number sentence represents this story?

A. $3 + 2 = 5$

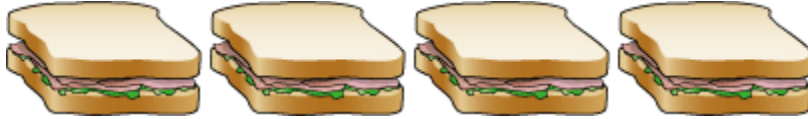
B. $3 - 2 = 5$

C. $5 + 2 = 7$

- 3) Eric made sandwiches for lunch. He made these cheese sandwiches.






He made these ham sandwiches.



Eric wants to know how many sandwiches he made in all.

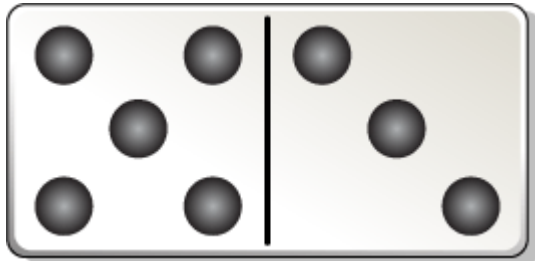
Write a number sentence Eric could use to find the answer.

- 4) Percy had 7 , 1 , and 5 . How many snacks did Percy have?

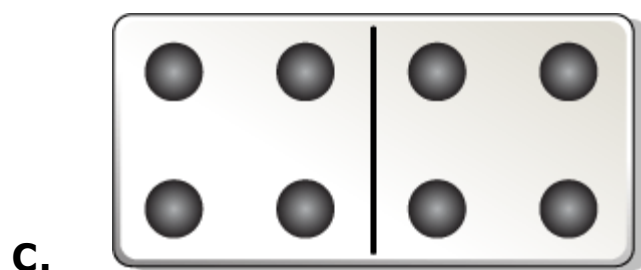
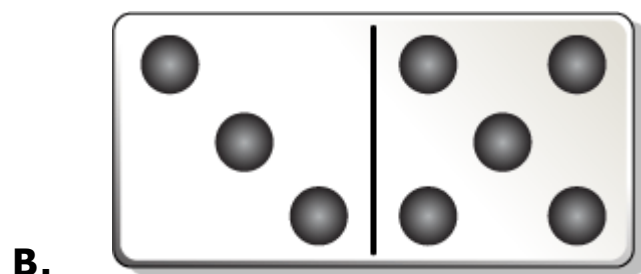
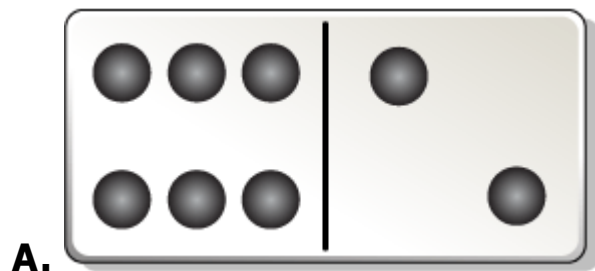
- A. $7 + 1 + 5 = 15$
- B. $7 + 1 + 5 = 13$
- C. $7 - 1 - 5 = 1$

- 5) Nick saw nine frogs and two zebras and one bird at the zoo. **How many animals did Nick see altogether? Draw a picture AND write a number sentence to show animals.**

6) Use the domino to answer the question.



Eva adds the number of dots on the domino. **Which domino shows a turn-around fact for $5 + 3$?**



- 7) Use the numbers below to make two number sentences using addition and two number sentences using subtraction:

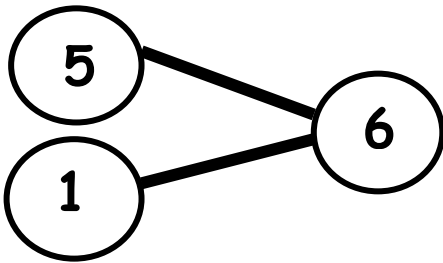
4		3		7	
_____	+	_____	=	_____	
_____	+	_____	=	_____	
_____	-	_____	=	_____	
_____	-	_____	=	_____	

- 8) Dana is trying to solve this problem.

$$10 - 7 = 17$$

Which addition fact will help Dana?

- A. $10 + 7 = 17$
B. $7 + 3 = 10$
C. $3 + 4 = 7$
- 9) Use the fact family to complete the problems below.



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

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

$6 - 5 = \underline{\hspace{2cm}}$

$6 - \underline{\hspace{2cm}} = 5$

- 10) Carrie read 5 books. She reads 1 more book. **How many books did Carrie read in all?**

- A. 4
B. 6
C. 7

11) Show 2 numbers to make 9.



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

12) Which doubles fact is true?

A. $4 + 4 = 7$

B. $6 + 6 = 12$

C. $8 + 8 = 18$

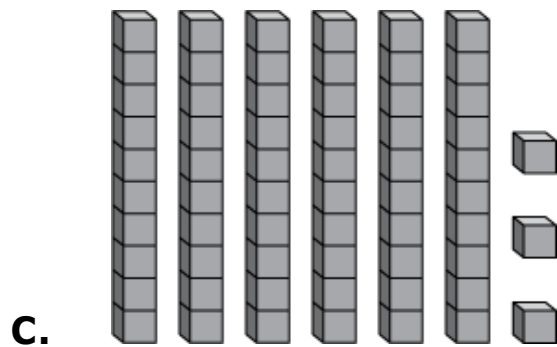
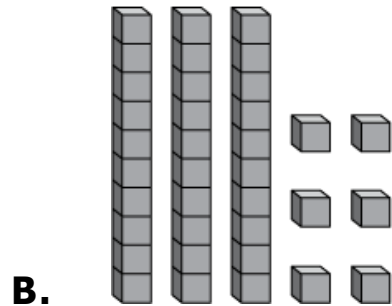
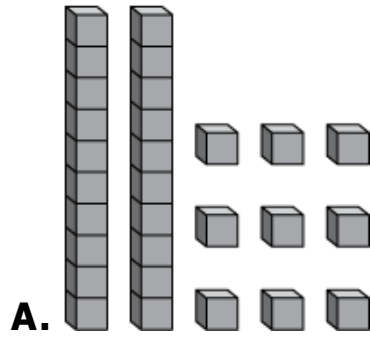
13) Jane has 10 muffins. She gives away 2. Jane wants to find out how many muffins she has left. **Which 10s fact should Jane use?**

A. $8 + 2$

B. $7 + 3$

C. $6 + 4$

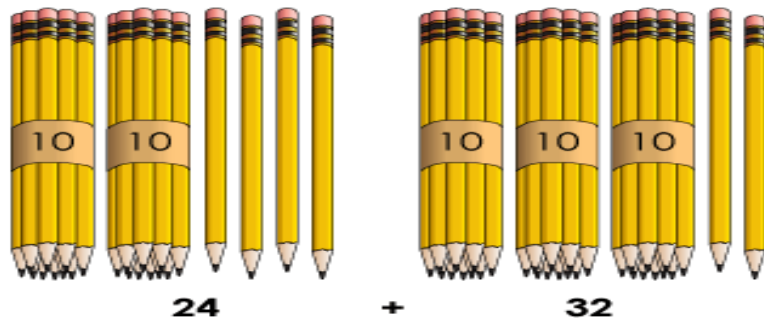
14) Josh models numbers with cubes. **Which set of cubes shows 36?**



15) What does "seventeen" mean?

- A.** 7 tens
- B.** 7 tens plus 1
- C.** 1 plus 7
- D.** 10 plus 7 ones

16) Mr. Smith had 24 pencils. He bought 32 pencils.



How many pencils does Mr. Smith have now?

- A. 54
- B. 56
- C. 65

17) A squirrel has 24 acorns.



Then the squirrel finds 17 more acorns.



How many acorns does the squirrel have now?

18)

$$\begin{array}{r} 37 \\ + 10 \\ \hline \end{array}$$

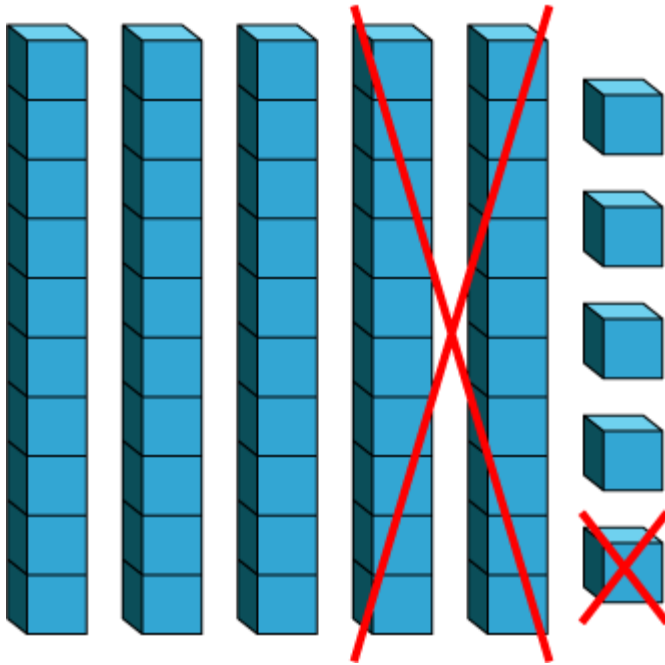
- A. 38
- B. 47
- C. 48
- D.

19) Ms. Snider is skip counting forward by 10s. What number finishes the pattern?

30 , 40 , 50 , _____

- A. 50
- B. 60
- C. 70

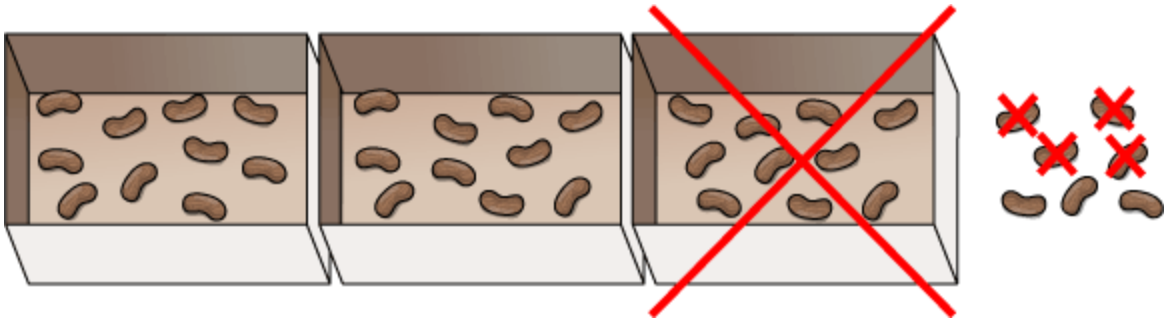
20) Jane has 55 cubes. Then she **subtracts** 21 cubes.



How many cubes are left?

- A. 21
- B. 34
- C. 76

21) Jay has 37 beans. He **subtracts** 14 beans.



How many beans are left over?

- A.** 23
- B.** 33
- C.** 51

Name:

Date:

Directions: Solve. Show your thinking. Use pictures and tools to help you.

Monti checked 8 books out of the library. He read 6 of them already. How many books does he still need to read?

There were 5 kids playing on the blacktop. 4 more students joined them. How many students are playing on the blacktop now?

Ten Frame

Counting Path

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

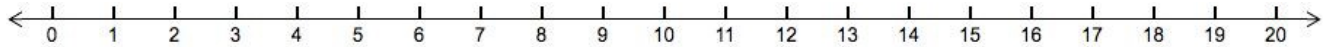
Twenty Chart

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

Name:

Date:

Solve the problems using the number line below.



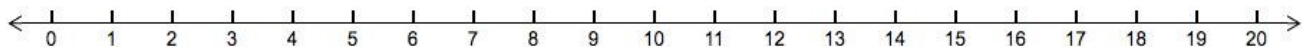
1 more than 14 is _____

13 is _____ less than 15

2 more than _____ is 11

16 is 2 less than _____

Circle the number that is 2 more than 14.



Name:

Date:

Grade 1 Mathematics Homework • Represent Addition and Subtraction

Draw a picture to go with each number sentence. Solve.

$$5 + 2 = \underline{\quad}$$



$$9 - 2 = \underline{\quad}$$



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



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



Name:

Date:

Name:

Date:

Directions: Solve. Show your thinking. Use pictures and tools to help you.

Kiara has 5 pencils in her school box. Her friend gave her 2 more. How many pencils does she have?

There were 6 cookies on the tray. I ate 2 for a snack. How many cookies are on the tray now?

Name:

Date:

A stick shows ten. A dot • shows 1.

Directions: Use sticks and dots • to show each number

18

12

14

7

13

8

15

3

18

Name:

Date:

Grade 1 Mathematics Homework • Compare Numbers to 19

Directions: Circle the number that is greater.

8

4

14

7

18

15

13

12

9

11

8

13

How do you know if 9 is less than 16? Use pictures or words.

Name:

Date:

- Show numbers to 99

A stick is ten. A dot is one●

Use sticks and ● dots to show each number below.

27

15

63

38

51

40

Name:

Date:

Circle the larger number. You can use a hundred chart to help you.

35

19

29

51

82

28

44

63

71

77

38

62

Write two numbers that are more than 48.

Write two numbers that are less than 81.

Hundred Chart (0-99)

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

Math Fact Fluency 1st Grade

Mental Math

1. MAKE TEN BY IDENTIFYING THE MISSING PART (4 minutes)

Materials: (S) Personal white boards

Directions:

T: If I say 9, you say 1, because 9 needs 1 to be 10.

T: Wait for the signal, 5.

S: 5.

Continue with the following possible sequence: 8, 2, 9, and 1.

T: This time I'll say a number and you write the addition sentence to make ten on your personal white board.

T: 0. Get ready. Show me your board.

S: $0 + 10 = 10$.

T: 10. Get ready. Show me your board.

S: $10 + 0 = 10$.

Continue with the following possible sequence: 3, 7, 6, and 4.

T: Turn and explain to your partner what pattern you noticed that helped you solve the problems.

S: First, you said 0 and the answer was $0 + 10 = 10$; next, you said 10 and the answer was $10 + 0 = 10$. The numbers switched places!

2. PAIRS TO MAKE TEN WITH NUMBER SENTENCES

(2 minutes)

Materials: (S) Personal white boards

Directions:

T: I'll say a number and you write the addition sentence to make 10 on your personal white board.

T: 5. Get ready. Show me your board.

S: (Show $5 + 5 = 10$.)

T: 8. Get ready. Show me your board.

S: (Show $8 + 2 = 10$.)

Continue w/ the following possible sequence: 9, 1, 0, 10, 6, 4, 7, and 3.

T: What pattern did you notice that helped you solve the problems?

S: You can just switch the numbers around! → If you say 8 and the answer is $8 + 2 = 10$, then I know that when you say 2 the answer will be $2 + 8 = 10$. → The numbers can switch places!

3. TAKE FROM TEN

(5 minutes)

Materials: (S) Personal white boards

Directions:

T: When I say 1, you say 9, because the game is to take the number I say from 10. Ready? 2.

S: 8.

Continue with the following sequence: 3, 6, 5, and 9.

T: This time, after you say how many are left, write the number sentence on your personal white board. 5.

S: 5.

S: (Write the number sentence on their boards.)

T: Show the number sentence.

S: (Show $10 - 5 = 5$.)

Continue with the following possible sequence: 7, 8, 6, 9, and 4.

4. MAKE A TEN TO ADD

(6 minutes)

Directions:

T: Let's make ten to add. I say $9 + 2$, and you say $9 + 2 = 10 + 1$.

Ready? $9 + 2$.

S: $9 + 2 = 10 + 1$.

T: Answer?

S: 11.

T: $9 + 5$.

S: $9 + 5 = 10 + 4$

T: Answer?

S: 14.

Continue with the following possible sequence: $9 + 7$; $9 + 6$; $9 + 8$; $8 + 3$; $8 + 7$; $7 + 4$; and $7 + 6$.

5. TAKE FROM 20

(4 minutes)

Materials: (S) Personal white boards

Note: This exercise will give students practice with making ten and applying it to multiples of 10.

Directions:

T: Take the number I say from 10. I say 1, you say 9. Then write the number sentence and wait for my signal to show it.

T: 7.

S: 3. (Write number sentence.)

T: Show your personal white boards.

S: (Show $10 - 7 = 3$.)

Continue with the following possible sequence: 8, 6, and 9.

T: This time instead of taking from 10, let's take from 20. Ready? 1.

S: 19. (Write number sentence.)

T: Show your personal white board.

S: (Show $20 - 1 = 19$.)

Continue w/ the following possible sequence: 3, 2, 5, 0, 6, 8, 7, and 9.

6. TAKE FROM 20

(5 minutes)

Materials: (S) Personal white boards

Note: Students use personal white boards to see the connection between taking from ten and taking from a multiple of ten.

Directions:

T: I say 2, you say 8, to take the number I say from 10. Then, write the number sentence. Get ready.

T: 6.

S: 4. (Write number sentence.)

T: Show your board.

S: (Show $10 - 6 = 4$.)

Continue with the following possible sequence: 7, 9, and 5.

T: This time instead of taking from 10, let's take from 20. Ready?

T: 1.

S: 19. (Write number sentence.)

T: Show your board.

S: (Show $20 - 1 = 19$.)

Continue with the following possible sequence: 5, 6, 8, and 3.

7. TWO MORE

(2 minutes)

Note: Students are eased into crossing multiples of ten by asking for just 2 more.

Directions:

T: For every number I say, you will say what number is 2 more. If I say 2, you say 4. Ready? 3.

S: 5.

Continue with the following possible sequence: 6, 9, 8, 18, 38, 58, 78, 9, 19, 39, 59, and 79.

8. TAKE FROM 20

(3 minutes)

Materials: (S) Personal white boards

Note: Students use personal white boards to see the connection between taking from ten and taking from a multiple of ten. As students show comprehension of the skill, practice orally without the personal boards.

Directions:

T: I say 3, you say 7, to take the number I say from 10. Write the number sentence and wait for my signal to show it.

T: 8.

S: 2. (Write number sentence.)

T: Show your personal boards.

S: (Show $10 - 8 = 2$.)

Continue with the following possible sequence: 4, 5, and 9.

T: This time instead of taking from 10, let's take from 20. Ready? 1.

S: 19. (Write number sentence.)

T: Show your personal board.

S: (Show $20 - 1 = 19$.)

Continue w/ the following possible sequence: 3, 2, 5, 0, 6, 8, 7, and 9.

9. BREAK APART & PUT TOGETHER BY PLACE VALUE

(2 minutes)

Note: Students remember the relevance of their ten plus facts to larger numbers.

Directions:

T: When I say $10 + 5$, you say 15. Ready?

S: 15.

T: $10 + 2$.

S: 12.

Continue with the following possible sequence: $10 + 9$, $10 + 4$, $20 + 4$, Challenge: $50 + 4$, $30 + 8$, and $70 + 8$.

T: How are $10 + 4$ and $50 + 4$ the same? How are they different?

T: How is knowing that helpful?

S: (Share.)

T: Now, when I say 13, you say $10 + 3$.

T: 13.

S: $10 + 3$.

Continue with the following possible sequence: 17, 11, 16, 18, 14
Challenge: 28, 78, 34, and 94.

10. SUBTRACT 1 FROM MULTIPLES OF 10

(3 minutes)

Materials: (T) Drawings on the board should be sufficient

Directions:

6. MORE/LESS (4 minutes)

Note: Practice with giving 1 or 10 more (or less) prepares students to add and subtract 1 and 10 fluently.

Directions:

T: For every number I say, you say a number that is 1 more. When I say 5, you say 6. Ready?

T: 5.

S: 6.

T: 8.

S: 9.

Continue with the following possible sequence: 9, 16, 19, 28, 38, 39, 44, 49, 54, and 60.

T: Now for every number I say, you say a number that is 10 more. When I say 50, you say 60. Ready?

T: 50.

S: 60.

T: 10.

S: 20.

Continue with the following possible sequence: 80, 40, 20, 21, 28, 30, 35, 45, and 56.

T: Let's try saying 1 less for every number I say. When I say 6, you say 5. Ready?

T: 6.

S: 5.

T: 9.

S: 8.

Continue with the following possible sequence: 11, 14, 19, 20, 30, 31, 51, and 50.

T: Now for every number I say, you say a number that is 10 less. When I say 50, you say 40. Ready?

T: 50.

S: 40.

T: 30.

S: 20.

Continue with the following possible sequence: 80, 70, 60, 61, 41, 46, 48, 28, and 18.

11. CHORAL COUNTING

(Time Varies)

Materials: chart paper, marker, base-ten blocks

Note: Teachers may want to devote an entire lesson to introducing this activity. After that, modify the activity to a short amount of practice each time, removing supports as students' counting skills improve.

Directions:

- The teacher will begin by asking a student volunteer to show 3 using base-ten blocks. The teacher will then record 3 on the chart.
- The teacher will then ask how students can show the number that is 10 more and invite another student volunteer to build 10 more with cubes. Student may add 10 individual units or a ten stick. The goal is for students to move from counting ten units to counting one unit of 10, and to connect the concrete representations of the numbers with abstract oral counting. The teacher will then record 13 on the chart.
- The teacher should continue this process, asking students "What's 10 more than ___?" and have student volunteers show 10 more with the base-ten blocks. At some point, a student will likely use a ten stick instead of ten ones; when this happens, the teacher can help the students see this is a more efficient strategy. If no students add a ten stick, the teacher can help them make this transition.
- The goal of writing the numbers on the chart paper as shown below is to record the numbers in a way that makes the "Add ten" pattern visible for students by recording 10 numbers in a row. Students may see patterns of 10 as they look across and hundreds as they look down

3	13	23	33	43	53	63	73	83	93
103	113	123	133	143	153	163	173	183	193
203	213	223	233	243	253	263	273	283	293

12. COUNTING WITH ONES, TENS, AND HUNDREDS: 0 TO 1,000

(4 minutes)

Materials: (T) Bundle of 1 hundred, 1 ten, and a single straw

Directions:

T: Let's count by ones, tens, and hundreds. I'll hold bundles to show you what to count by. A bundle of 100 means count by hundreds, a bundle of 10 means count by tens, and a single straw means count by ones. (Create visual support by writing the numbers on the board as students count.)

T: Let's start at 0. Ready? (Hold up a bundle of 10 until students count to 130.)

S: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130.

T: (Hold up a bundle of 100 until students count to 630.)

S: 230, 330, 430, 530, 630.

T: (Hold up a bundle of 10 until students count to 690.)

S: 640, 650, 660, 670, 680, 690.

T: (Hold up a single one until students count to 702.)

S: 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702.

T: (Isolate the numbers 698–702 by drawing a box around them.)

Partner A, count these numbers up and down as fast as you can to Partner B, and then switch. If you both finish before one minute is up, try it again and see if you get faster!

13. SKIP-COUNT BY TENS: UP AND DOWN CROSSING 100

(2 minutes)

Directions:

T: Let's skip-count by tens starting at 60.

T: Ready? (Rhythmically point up until a change is desired. Show a closed hand and then point down. Continue, mixing it up.)

S: 60, 70, 80, 90, 100, 110, 120, 130, 140. (Switch direction.) 130, 120, 110, 100, 90. (Switch direction.) 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220. (Switch direction.) 210, 200, 190, 180.

14. MIXED COUNTING WITH ONES, TENS, AND HUNDREDS FROM 1,000 TO 0

(5 minutes)

Materials: (T) Bundle of one hundred, one ten, and a single stick

Directions:

T: Let's play Mixed Counting using what we know about counting by ones, tens, and hundreds. I'll hold bundles to show you what to count by. A bundle of 100 means count by hundreds, a bundle of 10 means count by tens, and a single stick means count by ones.

T: Let's start at 1,000 and count down. Ready? (Hold up a bundle of 10 until students count to 940. If necessary, create visual support with the difficult language of these numbers by writing them on the board as students count.)

S: 990, 980, 970, 960, 950, 940.

T: (Hold up a bundle of 100 until students count to 540.)

S: 840, 740, 640, 540.

T: (Hold up a bundle of 10 until students count to 500.)

S: 530, 520, 510, 500.

T: (Hold up a single one until students count to 495.)

S: 499, 498, 497, 496, 495.

T: (Hold up a ten until students count to 465.)

S: 485, 475, 465.

Continue, varying practice counting with ones, tens, and hundreds down to zero.

15. SKIP-COUNTING SQUATS

(2 minutes)

Directions: Have students count up from 0 to 20 and back two times, squatting down and touching the floor on odd numbers and standing up for even numbers.

- For the first count, instruct students to whisper when they squat and talk normally when they stand.
- On the second count, encourage students to try thinking of the numbers in their heads when they squat and whisper when they stand.

16. X-RAY VISION: PARTNERS TO 10

(5 minutes)

Materials: (T) 10 counters, container

Directions:

- Tell students there is a rumor that some of the children in the class are superheroes, and some of them may have x-ray vision. Place 10 counters on the floor next to a container.
- Tell students to close their eyes.
- Put 1 of the items into the container
- Tell students to open their eyes and identify how many counters were put inside it.
- When a student figures it out, deem her a superhero with x-ray vision!
- Continue the game, eliciting all partners to 10.

17. TEN AND TUCK

(5 minutes)

Directions:

- Tell students to show 10 fingers.
- Instruct them to tuck 3 (students put down the pinky, ring finger, and middle finger on their right hands).
- Ask them how many fingers are up (7) and how many are tucked (3).
- Then, ask them to say the number sentence aloud,
 - beginning with the larger part ($7 + 3 = 10$)
 - beginning with the smaller part ($3 + 7 = 10$)
 - beginning with the whole ($10 = 3 + 7$ or $10 = 7 + 3$)

18. COUNT ON CHEERS

(3 minutes)

Directions:

- The teacher says a number aloud. Students repeat the number, touching their heads and counting on as they put their fists in the air, one at a time.
- Alternately, students can count on with boxing punches.
- Extend the game by counting back 2.

19. MATH HANDS FLASH

(5 minutes)

Directions:

T: (Hold up 9 fingers.) Show me how many fingers I need to make 10.

S: (Hold up 1 finger.)

T: 9 plus what number equals 10?

S: 1.

T: Good! $9 + 1 = 10$, so $10 - 9 = ?$ Look at your hands.

S: 1.

Continue playing, eliciting all partners of 10. If students are highly successful, switch to other totals within 10, such as 9, 8, or 7.

20. Penny Drop 7

(5 minutes)

MATERIALS NEEDED: 7-10 pennies, a tin can

DIRECTIONS:

Show students 7 pennies. Have students close their eyes and listen.

Drop some of the pennies in a can, one at a time. Ask students to open their eyes and guess how many pennies are still in the teacher's hand. Then, have students say how many people they heard drop and count on to 7, using the remaining pennies.

NOTE: This activity addresses the core fluency objective for Grade 1 of adding and subtracting within 10. Can extend to 10. (great for auditory learners)

21. COLD CALL: 2 MORE AND 2 LESS

(3 MINUTES)

ADD AND SUBTRACT WITHIN 10

Directions:

- Say a number aloud and instruct students to think about the number that is 2 more. Let them know that the teacher will cold call students to say the number as quickly as possible. Alternate between calling on individual students, the whole class, and groups of students (e.g., only girls, only boys, etc.).
- Play again, cold calling students to say the number that is 2 less.

22. TAKE OUT

(2 minutes)

Directions:

T: Take out 1 on my signal. For example, if I say “5,” you say “1 and 4.”

T: 3. S: 1 and 2. T: 10. S: 1 and 9.

Continue with all numbers within 10.

23. BREAK APART 10

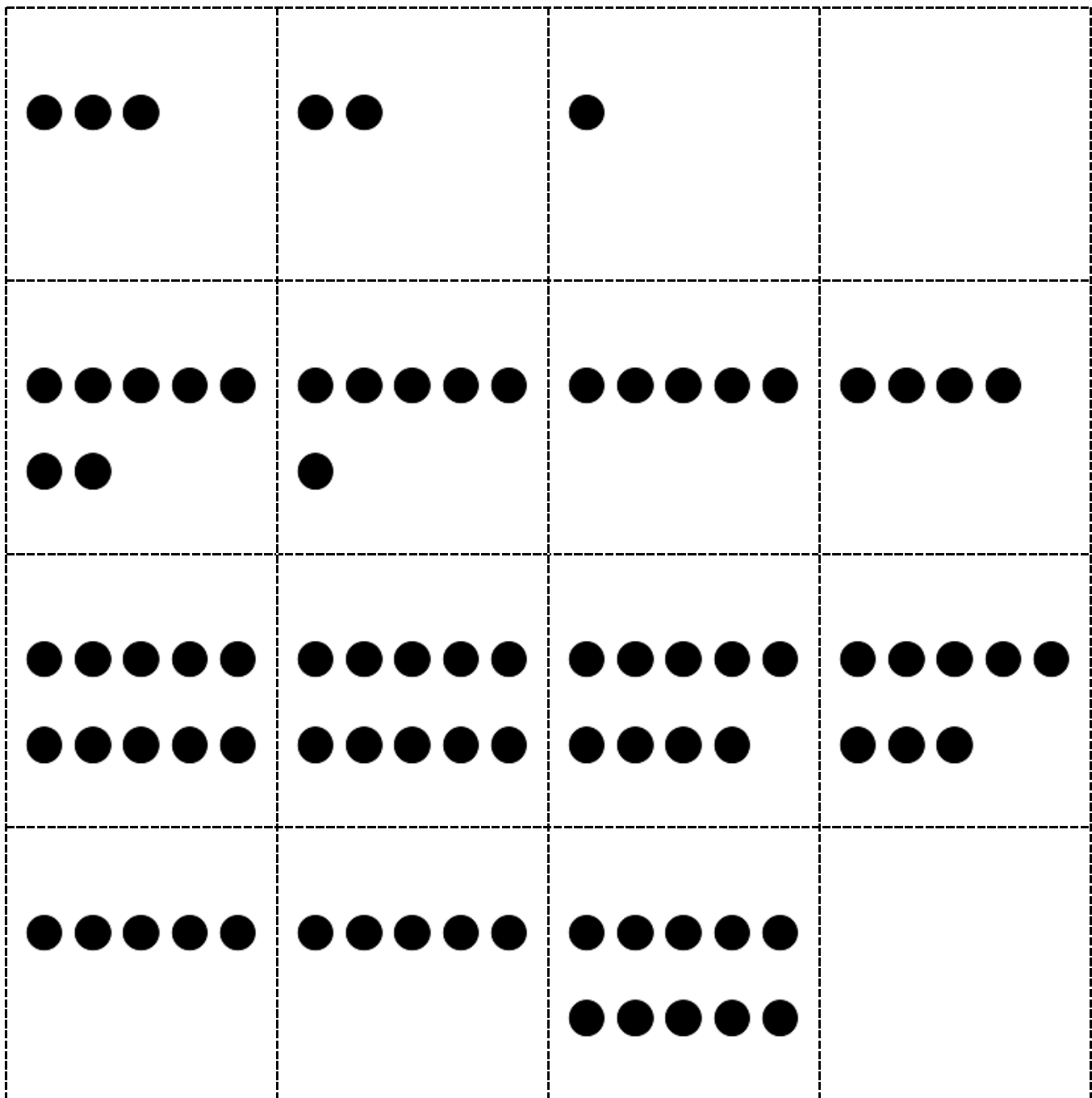
(5 minutes)

Materials: (T) NUMBER CARDS 1-5: print double sided,
(S) Personal white board Students write the numeral 10 on their personal white boards.

Directions: Flash a card. Students break apart 10 using the number flashed as a part.

0	1	2	3
4	5	<u>6</u>	7
8	<u>9</u>	10	10
	10	5	5

Copy number cards and dot cards so they are two sided



24. SPRINT: ADD THREE NUMBERS

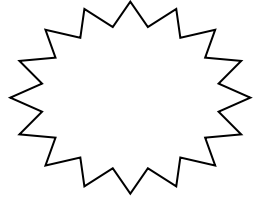
(10 minutes)

Note: This Sprint provides practice with adding three numbers by making ten first. For directions on how to use sprints, see Appendix.

Materials: (S) Add Three Numbers Sprint.

SPRINT: ADD THREE NUMBERS

Make a 10 to add



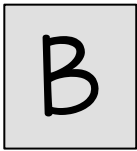
Number correct:



Name _____

Date _____

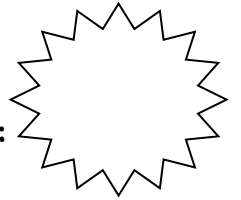
1	$9 + 1 + 3 = \square$		16	$6 + 4 + 5 = \square$	
2	$9 + 1 + 5 = \square$		17	$6 + 4 + 6 = \square$	
3	$1 + 9 + 5 = \square$		18	$4 + 6 + 6 = \square$	
4	$1 + 9 + 1 = \square$		19	$4 + 6 + 5 = \square$	
5	$5 + 5 + 4 = \square$		20	$4 + 5 + 6 = \square$	
6	$5 + 5 + 6 = \square$		21	$5 + 3 + 5 = \square$	
7	$5 + 5 + 5 = \square$		22	$6 + 5 + 5 = \square$	
8	$8 + 2 + 1 = \square$		23	$1 + 4 + 9 = \square$	
9	$8 + 2 + 3 = \square$		24	$9 + 1 + \square = 14$	
10	$8 + 2 + 7 = \square$		25	$8 + 2 + \square = 11$	
11	$2 + 8 + 7 = \square$		26	$\square + 3 + 4 = 13$	
12	$7 + 3 + 3 = \square$		27	$2 + \square + 6 = 16$	
13	$7 + 3 + 6 = \square$		28	$1 + 1 + \square = 11$	
14	$7 + 3 + 7 = \square$		29	$19 = 5 + \square + 9$	
15	$3 + 7 + 7 = \square$		30	$18 = 2 + \square + 6$	



SPRINT: ADD THREE NUMBERS

Make a 10 to add

Number correct:



Name _____

Date _____

1	$5 + 5 + 4 = \square$		16	$6 + 4 + 2 = \square$	
2	$5 + 5 + 6 = \square$		17	$6 + 4 + 3 = \square$	
3	$5 + 5 + 5 = \square$		18	$4 + 6 + 3 = \square$	
4	$9 + 1 + 1 = \square$		19	$4 + 6 + 6 = \square$	
5	$9 + 1 + 2 = \square$		20	$4 + 7 + 6 = \square$	
6	$9 + 1 + 5 = \square$		21	$5 + 4 + 5 = \square$	
7	$1 + 9 + 5 = \square$		22	$8 + 5 + 5 = \square$	
8	$1 + 9 + 6 = \square$		23	$1 + 7 + 9 = \square$	
9	$8 + 2 + 4 = \square$		24	$9 + 1 + \square = 11$	
10	$8 + 2 + 7 = \square$		25	$8 + 2 + \square = 12$	
11	$2 + 8 + 7 = \square$		26	$\square + 3 + 4 = 14$	
12	$7 + 3 + 7 = \square$		27	$3 + \square + 7 = 20$	
13	$7 + 3 + 8 = \square$		28	$7 + 8 + \square = 17$	
14	$7 + 3 + 9 = \square$		29	$16 = 3 + \square + 6$	
15	$3 + 7 + 9 = \square$		30	$19 = 2 + \square + 7$	

25. TAKE OUT 2: NUMBER BONDS

(4 minutes)

Materials: (S) Personal white board

Directions: Say a number within 10. Students quickly write a number bond for the number said, using 2 as a part, and hold up their boards when finished.

26. DECOMPOSING ADDITION SENTENCES

(5 minutes)

Directions:

T: (Write $9 + 5 = \underline{\quad}$ on the board.) What does 9 need to make ten?

S: 1.

T: (Write $9 + 1$ below $9 + 5 = \underline{\quad}$.)

T: (Point to the 5.) If we take 1 from 5 to make ten, what part is left?

S: 4.

T: (Add + 4 after $9 + 1$.) Say the number sentence with the answer.

S: $9 + 1 + 4 = 14$.

T: (Write 14 to complete $9 + 1 + 4 = \underline{\quad}$.) $9 + 1 + 4 = 14$. $9 + 5$ is...?

S: 14.

T: (Write 14 to complete $9 + 5 = \underline{\quad}$.)

Continue with other $9 + n$ and $8 + n$ addition sentences. If students are ready, have them use their boards to independently decompose addition sentences into three parts

27. SPRINT: SUBTRACTION WITHIN 10

(10 minutes)

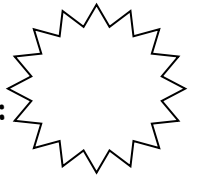
Materials: (S) Subtraction Within 10 Sprint

Note: This Sprint reviews subtracting from ten, along with other subtraction facts within the Grade 1 core fluency objective of adding and subtracting within 10. For directions on how to use sprints, see Appendix.

SPRINT: SUBTRACTION WITHIN 10

Write the missing number

Number correct:



A

Name _____

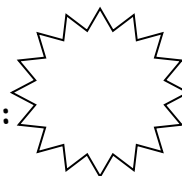
Date _____

1	$10 - 9 = \square$		16	$10 - \square = 5$	
2	$10 - 8 = \square$		17	$9 - \square = 5$	
3	$10 - 6 = \square$		18	$8 - \square = 5$	
4	$10 - 7 = \square$		19	$10 - \square = 3$	
5	$10 - 6 = \square$		20	$9 - \square = 3$	
6	$10 - 5 = \square$		21	$8 - \square = 3$	
7	$10 - 6 = \square$		22	$\square - 6 = 4$	
8	$10 - 4 = \square$		23	$\square - 6 = 3$	
9	$10 - 3 = \square$		24	$\square - 6 = 2$	
10	$10 - 7 = \square$		25	$10 - 4 = 9 - \square$	
11	$10 - 8 = \square$		26	$8 - 2 = 10 - \square$	
12	$10 - 2 = \square$		27	$8 - \square = 10 - 3$	
13	$10 - 1 = \square$		28	$9 - \square = 10 - 3$	
14	$10 - 9 = \square$		29	$10 - 4 = 9 - \square$	
15	$10 - 10 = \square$		30	$\square - 2 = 10 - 4$	

SPRINT: SUBTRACTION WITHIN 10

Write the missing number

Number correct:



B

Name _____

Date _____

1	$10 - 8 = \square$		16	$10 - \square = 0$	
2	$10 - 9 = \square$		17	$9 - \square = 0$	
3	$10 - 8 = \square$		18	$8 - \square = 0$	
4	$10 - 9 = \square$		19	$10 - \square = 1$	
5	$10 - 7 = \square$		20	$9 - \square = 1$	
6	$10 - 9 = \square$		21	$8 - \square = 1$	
7	$10 - 8 = \square$		22	$\square - 5 = 5$	
8	$10 - 7 = \square$		23	$\square - 5 = 4$	
9	$10 - 3 = \square$		24	$\square - 5 = 3$	
10	$10 - 7 = \square$		25	$10 - 8 = 9 - \square$	
11	$10 - 6 = \square$		26	$8 - 6 = 10 - \square$	
12	$10 - 4 = \square$		27	$8 - \square = 10 - 2$	
13	$10 - 3 = \square$		28	$9 - \square = 10 - 2$	
14	$10 - 7 = \square$		29	$10 - 3 = 9 - \square$	
15	$10 - 5 = \square$		30	$\square - 1 = 10 - 3$	

28. NUMBER PATH

(6 minutes)

Materials: (T/S) Personal white board, number path 1–20, counter and number cards

Directions:

T: Put your counter on 8.

S: (Place the counter on 8.)

T: How many spaces do you need to move to land on 10? (Pause to provide thinking time.)

S: 2.

T: Let's check. Move your counter to 10.

S (Move the counter to 10.)

T: Were you right?

S: Yes!

T: Write an equation to show what you did.

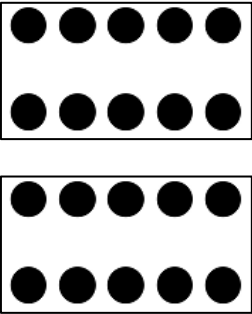
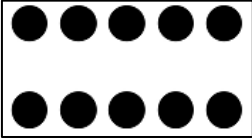



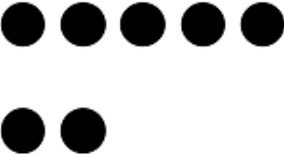



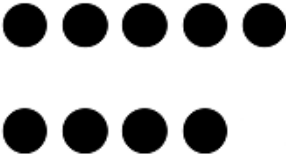
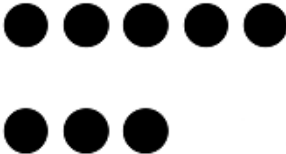
S: (Write $8 + 2 = 10$.)

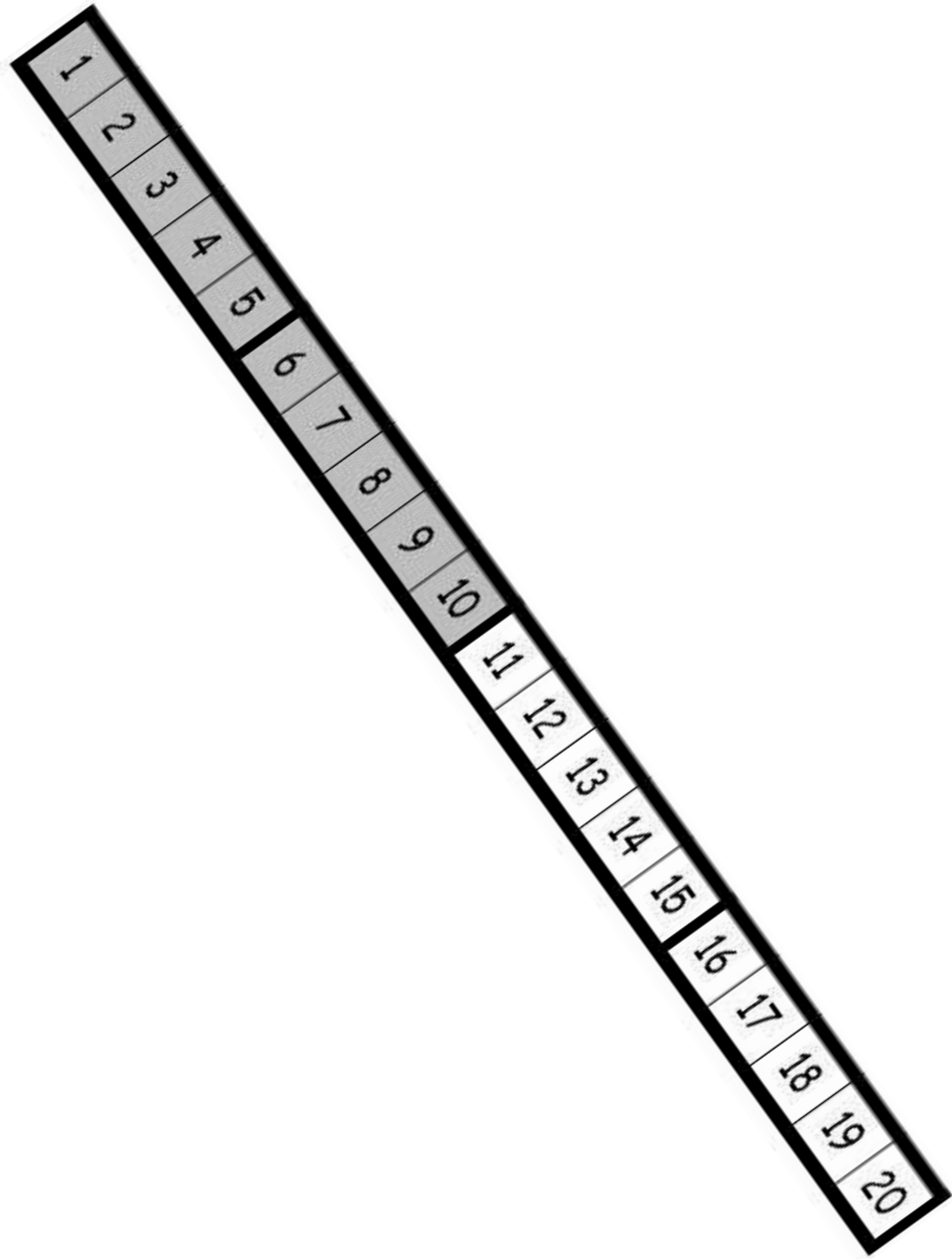
Continue moving to and from 10 within 10. Next, start at 10, and move the counters to and from teen numbers. Ask questions about how students determined the number of spaces they moved. Did they count each space, or did they “just know”?

1	0	2	0
0	1	2	3
4	5	<u>6</u>	7
8	<u>9</u>		

hide zero cards, numeral side (copy double-sided with next page)

hide zero cards, dot side (copy double-sided with previous page)



Number Path

29. SPRINT: MISSING ADDEND WITHIN 10

(10 minutes)

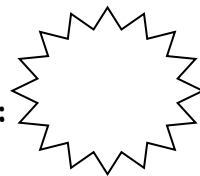
Materials: (S) Missing Addend Within 10 Sprint

Note: This review activity is intended to strengthen students' ability to fluently add and subtract within 10 while preparing students for the problem types that are presented in today's lesson. For directions on how to use sprints, see Appendix.

SPRINT: MISSING ADDEND WITHIN 10

Write the missing number

Number Correct:



A

Name _____

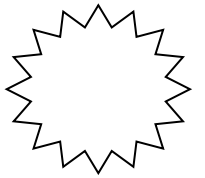
Date _____

1	$2 + \square = 3$		16	$2 + \square = 8$	
2	$1 + \square = 3$		17	$4 + \square = 8$	
3	$\square + 1 = 3$		18	$8 = \square + 6$	
4	$\square + 2 = 4$		19	$8 = 3 + \square$	
5	$3 + \square = 4$		20	$\square + 3 = 9$	
6	$1 + \square = 4$		21	$2 + \square = 9$	
7	$1 + \square = 5$		22	$9 = \square + 1$	
8	$4 + \square = 5$		23	$9 = 4 + \square$	
9	$3 + \square = 5$		24	$2 + 2 + \square = 9$	
10	$3 + \square = 6$		25	$2 + 2 + \square = 8$	
11	$\square + 2 = 6$		26	$3 + \square + 3 = 9$	
12	$0 + \square = 6$		27	$3 + \square + 2 = 9$	
13	$1 + \square = 7$		28	$5 + 3 = \square + 4$	
14	$\square + 5 = 7$		29	$\square + 4 = 1 + 5$	
15	$\square + 4 = 7$		30	$3 + \square = 2 + 6$	

SPRINT: MISSING ADDEND WITHIN 10

Write the missing number

Number Correct:



B

Name _____

Date _____

1	$1 + \square = 3$		16	$3 + \square = 8$	
2	$0 + \square = 3$		17	$2 + \square = 8$	
3	$\square + 3 = 3$		18	$8 = \square + 1$	
4	$\square + 2 = 4$		19	$8 = 4 + \square$	
5	$3 + \square = 4$		20	$\square + 2 = 9$	
6	$4 + \square = 4$		21	$4 + \square = 9$	
7	$4 + \square = 5$		22	$9 = \square + 5$	
8	$1 + \square = 5$		23	$9 = 6 + \square$	
9	$2 + \square = 5$		24	$1 + 5 + \square = 9$	
10	$4 + \square = 6$		25	$3 + 2 + \square = 8$	
11	$\square + 2 = 6$		26	$2 + \square + 6 = 9$	
12	$3 + \square = 6$		27	$3 + \square + 4 = 9$	
13	$3 + \square = 7$		28	$5 + 4 = \square + 6$	
14	$\square + 4 = 7$		29	$\square + 3 = 6 + 2$	
15	$\square + 5 = 7$		30	$4 + \square = 2 + 7$	

30. SPRINT: MISSING SUBTRAHENDS WITHIN 10

(10 minutes)

Materials: (S) Missing Subtrahends Within 10 Sprint

Note: This review activity is intended to strengthen students' ability to fluently add and subtract within 10 while preparing students for the problem types that are presented in today's lesson.

SPRINT: MISSING SUBTRAHEND WITHIN 10

Write the missing number

A

Number correct: 

Name _____

Date _____

1	$2 - \square = 1$		16	$6 - \square = 2$	
2	$2 - \square = 2$		17	$6 - \square = 3$	
3	$2 - \square = 0$		18	$6 - \square = 4$	
4	$3 - \square = 2$		19	$7 - \square = 3$	
5	$3 - \square = 1$		20	$7 - \square = 2$	
6	$3 - \square = 0$		21	$7 - \square = 1$	
7	$3 - \square = 3$		22	$8 - \square = 2$	
8	$4 - \square = 4$		23	$8 - \square = 3$	
9	$4 - \square = 3$		24	$4 = 8 - \square$	
10	$4 - \square = 2$		25	$2 = 9 - \square$	
11	$4 - \square = 1$		26	$3 = 9 - \square$	
12	$5 - \square = 0$		27	$4 = 9 - \square$	
13	$5 - \square = 1$		28	$10 - 3 = 9 - \square$	
14	$5 - \square = 2$		29	$9 - \square = 10 - 5$	
15	$5 - \square = 3$		30	$9 - \square = 10 - 6$	

SPRINT: MISSING SUBTRAHEND WITHIN 10

Write the missing number

B

Number correct: 

Name _____

Date _____

1	$2 - \square = 2$		16	$6 - \square = 3$	
2	$2 - \square = 1$		17	$6 - \square = 4$	
3	$2 - \square = 0$		18	$6 - \square = 5$	
4	$3 - \square = 3$		19	$7 - \square = 4$	
5	$3 - \square = 2$		20	$7 - \square = 3$	
6	$3 - \square = 1$		21	$7 - \square = 2$	
7	$3 - \square = 0$		22	$8 - \square = 3$	
8	$4 - \square = 4$		23	$8 - \square = 4$	
9	$4 - \square = 3$		24	$5 = 8 - \square$	
10	$4 - \square = 2$		25	$3 = 9 - \square$	
11	$4 - \square = 1$		26	$4 = 9 - \square$	
12	$5 - \square = 5$		27	$5 = 9 - \square$	
13	$5 - \square = 4$		28	$10 - 4 = 9 - \square$	
14	$5 - \square = 3$		29	$9 - \square = 10 - 6$	
15	$5 - \square = 2$		30	$9 - \square = 10 - 5$	

Directions for Administration of Sprints

One Sprint has two parts with closely related problems on each. The problems on each part move from simple to complex, creating a challenge for every learner. Before the lesson, cut the Sprint sheet in half to create Sprint A and Sprint B. Students complete the two parts of the Sprint in quick succession with the goal of improving on the second part, even if only by one more. With practice, the following routine takes about 8 minutes.

SPRINT A

(Put Sprint A face down on desks with instructions to not look at problems until the signal is given.)

T: You will have 60 seconds to do as many problems as you can.

T: I do not expect you to finish all of them. Just do as many as you can, your personal best.

T: Take your mark! Get set! THINK! (When you say THINK, students turn papers over and work furiously to finish as many problems as they can in 60 seconds. Time precisely.)

(After 60 seconds:)

T: Stop! Circle the last problem you did. I will read just the answers. If you got it right, call out "Yes!" If you made a mistake, circle it. Ready?

(Repeat to the end of Sprint A or until no one has any more correct.)

T: Now write your correct number at the top of the page. This is your personal goal for B.

T: How many of you got 1 right? (All hands should go up.)

T: Keep your hand up until I say a number that is 1 more than the number you got right. So, if you got 14 right, when I say 15 your hand goes down. Ready?

T: (Quickly.) How many got 2 right? And 3, 4, 5, etc. (Continue until all hands are down. Optional routine, depending on whether or not the class needs more practice with Sprint A.)

T: Take one minute to do more problems on this half of the Sprint.

(As students work, you might have the person who scored highest on Sprint A pass out Sprint B.)

T: Stop! I will read just answers. If you got it right, call out “Yes!” If you made a mistake, circle it. Ready? (Read the answers to the first half again.)

Note: To keep the energy and fun going, do a stretch or a movement game in between Sprints.

SPRINT B

(Put Sprint B face down on desks with instructions to not look at the problems until the signal is given. Repeat the procedure for Sprint A up through the show of hands for how many right.)

T: Stand up if you got more correct on the second Sprint than on the first.

S: (Stand.)

T: Keep standing until I say the number that tells how many more you got right on Sprint B. If you got 3 more right on Sprint B than on Sprint A, when I say 3 you sit down. Ready?

T: (Call out numbers starting with 1. Students sit as the number by which they improved is called. An alternate method is to choose three students to tell how many they got correct on Sprint A and Sprint B.)

For each set of scores, on your signal, the class chorally says the difference. This provides frequent practice with counting on and other mental strategies, and it reinforces the relationship between addition and subtraction.

T: Miguel, how many did you get correct on Sprint A and Sprint B?

S: On Sprint A, I got 12, and on Sprint B I got 17.

T: How many more did Miguel do on Sprint B than on Sprint A? (Pause.)

S: 5!