## Lesson 1 Numbers to 20

## Objective

- Understand the structure of a two-digit number within 20 as 10 and some more.


## Lesson Materials

- Straws or linking cubes, 20 per student
- Number Cards (BLM) 11 to 20 for each student
- Ten-frame Cards (BLM) 11 to 20
- Number Word Cards (BLM) 11 to 20, 1 set per student


## Think

Provide pairs of students between 11 and 20 straws or linking cubes and have them count them. Model counting 1, 2, 3, 4, etc.

Ask students if there is an easier way to count the items and allow them to share suggestions. Examples:

- Count by Rs.
- Count by 5 s.
- Group them up into bundles of 10 .

Show students that it can be easy to group 10 and count from there. Have students make a 10 (either by linking their cubes or bundling the straws) and count on from the 10.


In their sets of Number Cards (BLM) and Number Word Cards (BLM), have students find the number card and number word card that matches how many items they have.

Encourage students to think of their number as 10 and $\qquad$ .
$\qquad$

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Lesson 1
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Think
How many straws are there?


Learn


## Learn



Discuss Sofia and Dion's thoughts and number bonds.

Write additional number bonds on the board similar to those at the bottom of the page, with 10 as one of the parts.

- 11 is 10 and 1 .
- 12 is 10 and 2 .


## Do

(1) Have students match Number Cards (BLM), Number Word Cards (BLM), and Ten-frame Cards (BLM) for numbers 11 to 20.

## Activities

## - Magic Thumb

Using your thumb to point up or down, have students chorally count on and back within 20 by ones.

Example: "Let's count by ones starting at 10, first number?" Class: "10." Point thumb up (class
responds, "11"), then point up again (class responds, "12"). Point down (class responds, "11"), and so on.

## - Ten and More Face-off

Materials: 4 sets of Ten-frame Cards (BLM) 0 to 9 , Ten-frame Card (BLM) for 10 for each player

Do
(1) Show the numbers from 11 to 20 with ten-frame cards, number cards, and number word cards.

(2) How many party hats are there?

(3) How many lollipops are there?

(4) How many cherries are there?


17 is 10 and 7 . $17=10+7$

Play in pairs or groups of three or four.
Each player receives a Ten-frame Card (BLM) for 10 and places it faceup in front of herself. This " 10 " card becomes one of the addends in each face-off.

Deal out the remaining Ten-frame Cards (BLM) and have each student place their pile facedown in front of them. Each player turns over the top card from their pile and adds that card to the 10 , saying the addition problem (for example, " 10 plus 8 equals 18 ").

The player with the greatest total wins all of the non10 cards. All players retain their original " 10 " card for their next face-off.

The player with the most cards at the end wins.

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## Objective

- Make 10 with 2 one-digit numbers by making a 10 with the first addend.


## Lesson Materials

- Linking cubes, 10 each of 2 different colors per student
- Blank Double Ten-frames (BLM), 1 per student
- Peppers or classroom objects, 9 of one item and 4 of another


## Think

Pose the pepper problem from Think. Provide students with linking cubes and a Blank Double Tenframe (BLM) to help them work through the problem. Have students share the method they used for solving the problem. Examples:

- I counted them all.
- I counted on from 9 .
- I used the ten-frames.


## Learn

Have students begin by representing the yellow peppers on one ten-frame with one color of cubes, and the red peppers on the other ten-frame with the other color of cubes. Students should note that if they had one more pepper on their first ten-frame, that it would be a full ten-frame and easy to see that 10 and 3 make 13 , the same as 9 and 4 .

Help students realize that they are just moving the existing cubes between ten-frames to make a simpler problem, and that no cubes were added.

Provide additional examples by adding 9 and numbers less than 5 . Follow with adding 8 and numbers less than 5 .

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\begin{aligned}
& \text { Lesson } 1 \\
& \text { Add by Making } 10 \text { - Part } 1
\end{aligned}
$$

Think


Learn


There are 13 peppers altogether.

Looking at the text, note how Alex is splitting the number 4 into 1 and 3 .

Show the following number bond on the board, emphasize that the 9 and 1 are being combined to make a 10 by circling the numbers. Then adding the remaining part of 4 , or 3 .


$$
9+4=10+3
$$

## Do

While working through the Do problems, reinforce the concept that 8 plus 3 is the same as 10 plus 1 because we can take 2 from the 3 and add them to the 8 . Now there are 10 and 1 more.
(1) - (3) Students should work these problems on whiteboards. Have them show each part on a tenframe as needed.

Students that struggle can cross off the number being split.

(4) Problems are scaffolded to encourage students to use the strategy. The first equation in a row encourages students to determine how many make 10 so they know how to decompose the second addend in the next equation. For example, 9 and 1 make 10 , so 9 and 8 make 10 and?
©


There are 8 green scissors and 5 pink scissors.
How many scissors are there in all?

$8+5=13$
There are 13 scissors altogether.
(2) Add 3 to 8 .

(a) $8+4=12$
(b) $9+7=16$
(c) $6+5=11$
(d) $7+6=13$
(e) $8+8=16$
(f) $7+7=14$
(f) $7+7=14$

## Lesson 2 Subtract from 10 - Part 2

## Objective

- Subtract a one-digit number from a twodigit number.


## Lesson Materials

- Linking cubes, 10 each of 2 different colors per student
- Blank Double Ten-frames (BLM)
- Counters
- 12 play fish or other classroom objects


## Think

Pose the Think problem and provide students with linking cubes and Blank Double Ten-frames (BLM). Have students share their strategies for solving the problem.

Ask students what is similar and what is different in this problem compared to the problem with the crackers in the prior lesson. Possible student
 answers:

- There are trout instead of crackers.
- I can take 7 from the 10.
- Before we took away only 8 or 9 , now we're taking away 7.


## Learn

Have students make 10 with one color of cubes and 2 with the other color. Have them take the 7 from the 10. They can then add the 3 and 2 to get 5 .

Looking at the text, note how Dion is splitting the number 12 to 10 and 2 , and subtracting from the 10 .

Provide additional examples subtracting 6 and 7 from wholes of 12 through 15 . Have the students use the cubes if needed, and show the number bonds on their whiteboards.

## Do

Provide students with Blank Double Ten-frames (BLM) and counters if needed to solve the problems.

Students may orient their number bonds in any way that helps them remember to subtract from the 10.

(4) - 5 Have students discuss their thinking.

Using 4 (a) as an example, a student might respond, " $10-7$ is $3.14-7$ is the same as $10-7$ plus 4 . So $14-7$ is $3+4$."


Subtract 5 from 11 .

$11 \Theta 5=6$

(4) (a) $10-7=3 \quad 14-7=3+4 \quad 14-7=7$

## Lesson 3 Subtract the Ones First

## Objective

- Subtract a one-digit number from a twodigit number.


8 As Lisa has read all of pages 3 through 12, the subtraction equation $12-3=9$ will not be sufficient to find the correct answer of 10 pages read.

Students could use counters or check this answer with pages from this book. It is possible they will see that the 12th page is included and solve this problem with $13-3=10$.


## (6) What comes next? <br> 

Write an equation for each and find the answer.
(a) Mari has 7 books.

She buys 5 more books.
How many books does she have now?
(b) Salim wants to read 15 books

He has read 9 books so far.
How many more books does he still need to read?
(c) Tyler found 15 seashells.

3 of them are broken.
How many seashells are not broken?
(d) Holly gave away 3 seashells

She now has 6 seashells.
How many seashells did she have at first?
$3+6=9$
(e) There are 14 dogs in an animal shelter. 7 of the dogs are adopted. How many dogs are waiting to be adopted? $14-7=7$
(f) 4 cats were adopted in the morning 8 cats were adopted in the afternoon. How many cats were adopted that day?

$$
4+8=12
$$

8 Lisa read from the beginning of the 3rd page to the end of the 12th page in a book.
How many pages did she read?

