

Ten and Some Extra

Grade 1

Lesson 114

Relevant Chapters in the *Digi-Block Comprehensive Teacher's Guides*:

Book I: Unit 3-1, *Joining and Separating*, pp. 65-68

Book II: Unit 3-1, *Joining and Separating*, pp. 57-60

Lesson Overview

Partners find sums of single digit numbers (0-9) by finding the complement to 10 and then adding the extra.

Objectives

Thinking Skills: Students begin to think of addition as packing blocks-of-10 and finding the extra. They connect the single counting view of a teen number with the base ten, packed view of a teen number.

Mastery Skills: Students learn to model addition by combining sets of single blocks.

Materials

- 1 overhead transparency of the activity sheets pp. 1-2 (optional)

Each pair of students needs:

- 20 single blocks
- 1 small holder
- 1 set of number cards (4-9)

- 1 "Ten and Some Extra" activity sheets p.1-2
- "Ten and Some Extra" activity sheets p.3 (Fill in the numbers for your students. Copy as needed.)

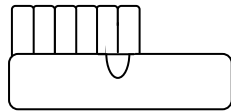
Class Introduction

(10 minutes)

Have students sit with a partner. Pass out activity sheet 1 and give each pair of students 20 single blocks and 1 small holder. Ask a student to read the first number sentence on the activity sheet:

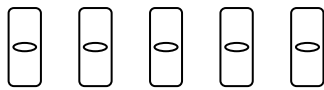
$$6 + 5 \text{ "six plus five":}$$

Ask one student in each pair to count out 6 blocks and put them in a holder.



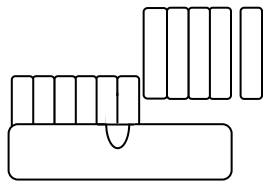
"One, two, three, four, five, six"

Ask the second student in each pair to count out 5 single blocks.



"One, two, three, four, five"

Have students explain that the "+" sign tells them to combine all the blocks. Ask, **How many more blocks do you need to make a block-of-10? How many blocks are extra?** Have students fill the holder and see the extra.



As you ask the questions, record their responses in the following number sentence:

$$6 + 4 + 1$$

Ask, **How many blocks do you have altogether?** When identifying the sum, have students count all the single blocks in the number 11. Then have

students “see” this number as 1 block-of-10 and 1 single block. Record the number sentence:

$$10 + 1 = 11$$

Have students fill in the blanks on their activity sheet. Then repeat with $7+5$, $8+5$, and $9+5$. Each time focus on how many blocks are needed to make a block-of-10 and how many are extra. Have students record the number sentences for each example.

Activity

(15 minutes)

Hand out p. 2 of the activity sheets. Have students repeat the demonstrated activity with a partner.

Repeat with additional activity sheets as needed.

Closure

(15 minutes)

Bring the class together to share answers and to discuss patterns in the teen numbers.

As a class, make a list of all the teen numbers as a block-of-10 and some extra ones: $11=10+1$, $12=10+2$, $13=10+3$, $14=10+4$, $15=10+5$, $16=10+6$, $17=10+7$, $18=10+8$, and $19=10+9$.

Assessment

As students use blocks to model addition problems, observe and note the following. Do they -

- Readily identify all digits 0-9?
- Accurately count out sets of single blocks (0-9)?
- Accurately three addends?
- Identify how many more to 10 without counting? (Or, do they need to count to determine how many more to 10? Do they frequently miscount or lose track as they try to determine how many more to ten?)
- Readily identify the “extra”?

- "See" the sum without counting all the blocks one at a time? (Or, do they need to count all the blocks in order to determine the sum.)
- Recognize that each teen number is 1 block-of-10 and some extra blocks?
- Realize that the "extra" amount of blocks is always the digit in the ones place?

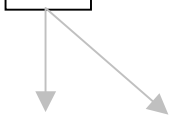
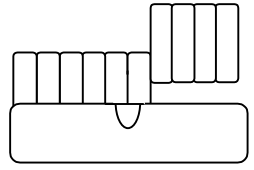
Extensions

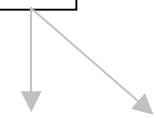
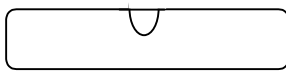
The following activities can help struggling students and can help students to organize their thinking around this activity:

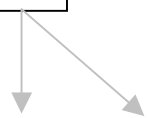
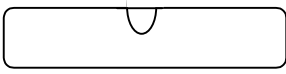
- Have students break apart all the single digit numbers (0-9) into two addends. For example, 5: $5+0$, $4+1$, $3+2$, $2+3$, $1+4$, $0+5$.
- Have students find and record all the combinations of two addends that make 10: $10+0$, $9+1$, $8+2$, $7+3$, $6+4$, $5+5$, $4+6$, $3+7$, $2+8$, $1+9$, and $0+10$.

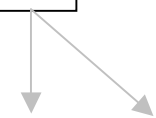
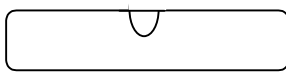
Ten and Some Extra

How many more to make ten?
How many extra?

$\boxed{6} + \boxed{5}$

 $\underline{6} + \underline{4} + \underline{1}$

 $\underline{10} + \underline{1} = \underline{11}$

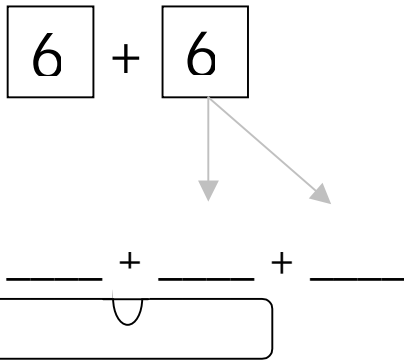
$\boxed{7} + \boxed{5}$

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

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

$\boxed{8} + \boxed{5}$

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

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

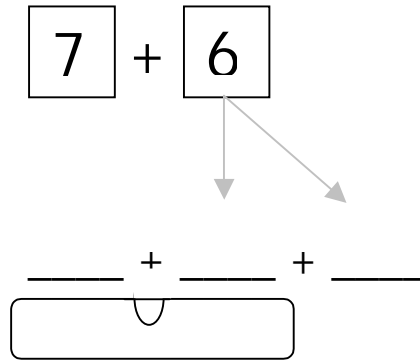
$\boxed{9} + \boxed{5}$

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

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

Ten and Some Extra

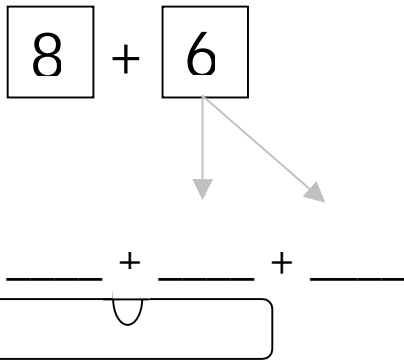
How many more to make ten?
How many extra?



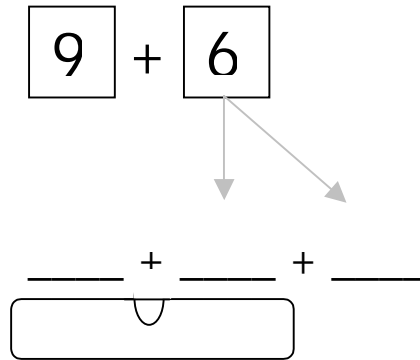
$$\underline{10} + \underline{\quad} = \underline{\quad}$$



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



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



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

Ten and Some Extra

How many more to make ten?
How many extra?

$$\square + \square$$

$$\underline{\quad} + \underline{\quad} + \underline{\quad}$$

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

$$\square + \square$$

$$\underline{\quad} + \underline{\quad} + \underline{\quad}$$

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

$$\square + \square$$

$$\underline{\quad} + \underline{\quad} + \underline{\quad}$$

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

$$\square + \square$$

$$\underline{\quad} + \underline{\quad} + \underline{\quad}$$

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