Subtracting a Multiple of 10

By utilizing what they have learned about place value and the base ten system, children can identify a multiple of 10 as the number of tens it is. Using concrete objects to practice subtracting multiples of 10 from multiples of 10 helps children expand their understanding of place value, the base ten system, the concept of zero, and properties of operations.

Objective

Subtract a multiple of 10 from a multiple of 10.

Common Core State Standards

■ **1.NBT.6** Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Try It! *Perform the Try It! activity on the next page.*

Talk About It

Discuss the Try It! activity.

■ Have children continue the Try It! activity with three Base Ten rods on the number line. **Say:** *Eva has 30 beads. She uses 20 more beads to make another necklace to give her mom.* **Ask:** *How many beads does she have left now?* Have pairs remove two Base Ten rods from the number line to show 10.

■ Have children continue the Try It! activity with one Base Ten rod on the number line. **Say:** *Eva has 10 beads. She uses the 10 beads to make a bracelet.* **Ask:** *How many beads does she have left now?* Have pairs remove the Base Ten rod from the number line to show 0.

Solve It

With children, reread the problem. Instruct children to draw a picture showing how many beads Eva has left after she makes the necklace. Then have children write the subtraction sentence for the problem.

More Ideas

For other ways to teach subtracting a multiple of 10 from a multiple of 10—

■ Distribute the ¾ Inch Grid (BLM 6) to children and have them turn it sideways. Have children count the number of squares in one row (10). Have children write 10, 20, 30, 40, 50, 60, 70, 80 in the far right boxes. Have them slide their fingers up the appropriate number of tens to find 70 – 20, 50 – 40, and 60 – 30.

■ Give 9 Base Ten Block rods in a small bag to pairs of children. Have pairs take a handful, count them, and then subtract 20. Have children write the number sentence. Repeat with other numbers.

Formative Assessment

Have children try the following problem.

Circle the correct answer.

80 – 30 = _____

A. 60   **B.** 50   **C.** 40

## Try It! 20 minutes | Pairs

Here is a problem about subtracting a multiple of 10 from a multiple of 10.

Eva has 50 beads. She uses 20 beads to make a necklace. How many beads does she have left?

Introduce the problem. Then have children do the activity to solve the problem. Distribute Base Ten Blocks and the Number Line (BLM 4) to children. Help children assemble number lines or prepare number lines before the lesson.

Materials
- Base Ten Blocks (9 rods and 9 units per pair)
- Number Line (BLM 4; 1 per pair)
- pencils (1 per pair)
- scissors and tape
- paper (1 sheet per child)
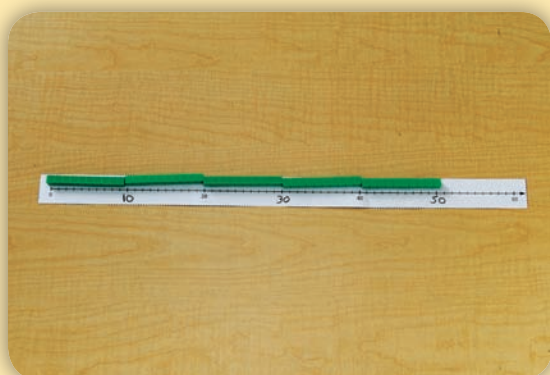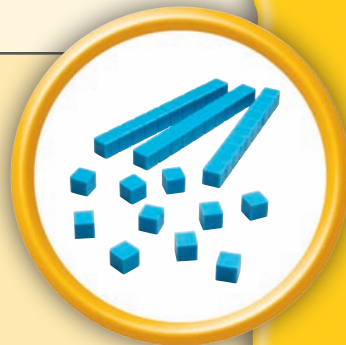
1. Have children label the missing tens (10, 30, 50) on the number line. They can use a Base Ten rod as a measuring guide. Have one child in each pair place Base Ten rods on the number line to show 50, the number of beads Eva has to start. **Ask:** *How many tens does 50 have? How many ones?*
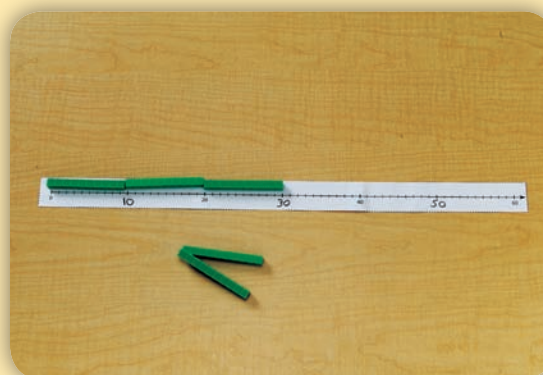
2. Say: *Eva uses 20 beads to make a necklace.* **Ask:** *How many tens does 20 have? How many ones? Do we need to add or subtract two tens from 50?* **Say:** *The problem asks how many she has left, so we need to subtract.* Have the other child remove two Base Ten rods from the number line.

⚠ Look Out!

Watch for children who are still struggling with the concept of tens. Provide extra practice for these children, building 20, 30, 40, 50, 60, 70, 80, and 90, and then removing rods to make 80, 70, 60, 50, 40, 30, 20, and 10. Elicit that only the tens place changes as the number of rods is changed.
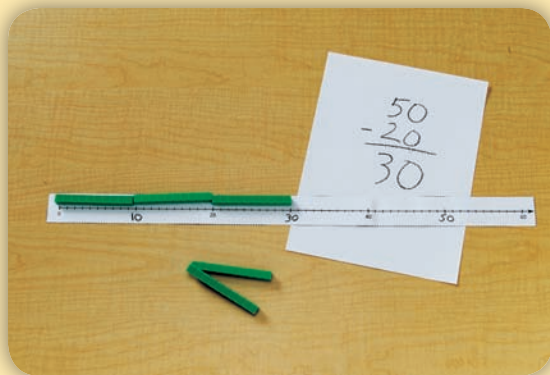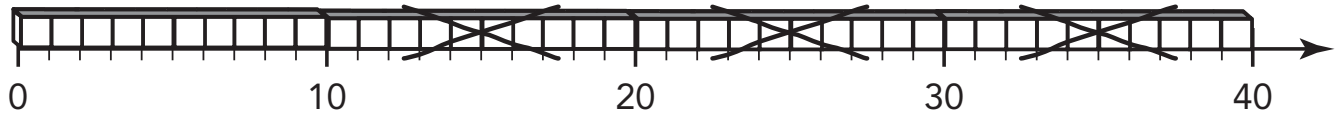

3. Relate the activity to the written method. On the board, demonstrate the problem as a number chart in columns. Have children copy it onto their recording paper. Tell them to be sure to line up the numbers correctly in the tens and ones columns.

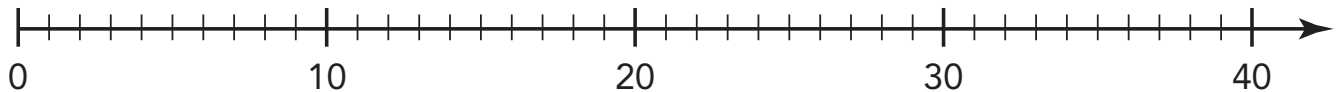## Use Base Ten Blocks. Build each number. Write the numbers and the difference.

(Check students' work.)

1. ___40___ – ___30___ = ___10___

0   10   20   30   40

Use Base Ten Blocks. Build the numbers. Draw the models. Subtract.

2. 30 – 30 = ___0___

0   10   20   30   40

Subtract.

3. 70 – 50 = ___20___

4. 90 – 40 = ___50___

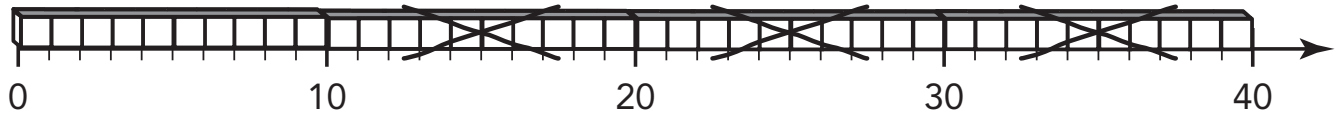5. 60 – 20 = ___40___

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Challenge!   Does the number in the tens place or the ones place change when you subtract 20 from 50? Why?

Challenge: (Sample) The number in the tens place changes because there are no ones, only tens to subtract.

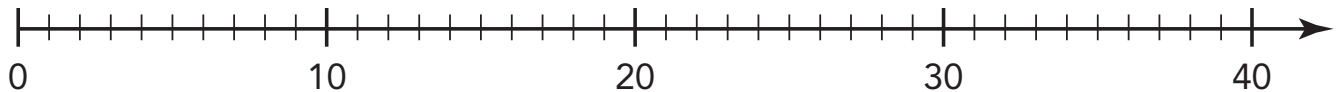Download student pages at hand2mind.com/hosstudent.   Hands-On Standards, Common Core Edition   **97**

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Name _____

Use Base Ten Blocks. Build each number. Write the numbers and the difference.

1. _____ – _____ = _____

Use Base Ten Blocks. Build the numbers. Draw the models. Subtract.

2. 30 – 30 = _____

Subtract.

3. 70 – 50 = _____

4. 90 – 40 = _____

5. 60 – 20 = _____

Challenge!   Does the number in the tens place or the ones place change when you subtract 20 from 50? Why?

_____

_____

_____

_____

_____

Name

0

20

20

40

40

60