

Eureka Math Module 5 Lesson 12

Objective: Represent numbers 20 to 11 in tower configurations decreasing by 1 – a pattern of 1 smaller.

Fluency Warm-Up Practice

Write Teen Numbers

Materials: One group of 10 counters of the same color, 10 counters of a different color, paper and pencil, or white board and marker

Note: By writing the corresponding numeral for each part and then the whole, students are continually reminded that the 1 in teen numbers refers to 10 ones.

P: Place ten counters in front of you.

P: Place 3 counters next to your ten counters.

P: Write the number of counters that you placed in front of you.

P: (Students write 13.) Say the number.

S: Ten 3. Thirteen.

Repeat process for several other teen numbers.

Count the Say Ten Way

Note: Counting up and down prepares students to work with the pattern of 1 less in the Concept Development.

P: Let's count the Say Ten way.

Guide students to count forward and backward between 10 and 20.

Application Problem

Peter was sitting at lunch eating his french fries. He counted 8 left on his plate. He ate 1 french fry. Then, he ate another french fry. How many french fries did Peter have then?

Note: the purpose of this Application Problem is to simply prepare students for thinking about 1 less. Eight. 1 less is 7. Seven. 1 less is 6.

Concept Development

Materials: 2 sets of counters (10 in one color and 10 in another color), sentence frame (Template)

Note: Notice that we are not saying “19 is one less than 20.” This is very complex linguistically for many kindergarten students who can say “19 is less than 20” without quantifying the difference. We simply are extending the “one more” lesson to “one less” as an opportunity for the students to do counting of teen numbers in a linear configuration: the line of counters.

P: Create a straight line of counters of the same color.

P: How many counters are in your line?

S: Ten

P: How many ones is that?

S: 10 ones.

P: Now make a straight line with your other counters.

P: How many counters are in this line?

S: Ten

P: Join the two lines. What is 10 ones and 10 ones?

S: Twenty. 2 tens.

P: How can we show 19?

S: Take away 1 counter.

P: Say this with me: "20. 1 less is 19." (Use sentence frame for support.)

P: Take away another counter. Be sure to take away the same color as before. How many counters are in your line now?

S: (Allow your student to figure it out.) 18.

Students continue in this manner, taking away one counter each time, down to 10. As they remove each counter, have them express the relationship of each number to the preceding number, for example, 18. 1 less is 17.

Complete Module 5 Problem Set 12 and Exit Ticket 12.