

Eureka Math Module 5 Lesson 10

Objective: Build a Rekenrek to 20.

Fluency Practice Warm-Up

Writing Teen Numbers

Materials: counters, paper pencil

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: (Show 3 counters.) Write the number.

S: (Student writes the numeral 3.)

P: (Show 10 counters.) Write the number.

S: (Student writes the numeral 10.)

P: (Show 13 counters.) Write the number.

S: (Student writes 13.)

Repeat the process for the following possible sequence: 10, 13, 19, 5, 17, 8, 18, 15, 12, 14, 16

Showing Numbers with Hands

Materials: 20 bead Rekenrek (A Rekenrek has two sets of ten beads. Each group of 10 beads has 5 red and 5 white.) You can use two sets of 10 counters in place of the Rekenrek.

Note: Relating the group of 10 on the Rekenrek to student's own hands helps them internalize the structure of teen numbers.

P: (Show 12 on the Rekenrek.)

P: Show the two parts of the number on your fingers. Say the parts at the same time.

S: 10(Flashing 10 fingers) and 2 (showing two fingers).

Continue with the following possible sequence: 13, 14, 19, 16, 18, 15, 11, 17, 20.

Application Problem

Ms. Garcia is painting her fingernails. She has painted all the fingers on her left hand except her thumb. How many more nails does she need to paint? How many more does she have to paint after she paints her left thumb? Draw a picture to help you.

Concept Development

Materials: Problem Set, 10 red pony beads, 10 white pony beads, a red crayon, a black crayon (Or two sets of 10 counting objects)

P: (Pass out the Problem Set. Have students put the beads or counters on the circles below the first pair of hands, 5 red on the left, and 5 white on the right.)

P: Imagine these red beads are Ms. Garcia's painted fingernails. Show me how many she painted at first (in Application Problem). Put them on her fingernails.

S: (Move 4 beads from the circles to the fingernails, starting with the left pinky finger.)

P: How many fingernails did she paint, and how many does she need to paint? Use these words to help. Listen.

P: She painted ____ fingernails. She needs to paint ____ fingernails.

S: She painted 4. She needs to paint 6.

P: Paint one more nail on her left hand. Tell me what she's painted and what she needs to paint.

S: She painted 5. She needs to paint 5.

Continue the pattern of painting one more fingernail and making statements that describe how many have been painted and need to be painted. Have the students work independently as soon as they can. Once they have finished the first pair of hands, have them use the second pair of hands for Ms. Garcia's daughter's unpainted nails. Have them put beads on her fingers, counting and making statements as they go. Engage them in counting all the beads, analyzing how many are red and how many are white, how many are on the left hands, and how many are on the right hands.

Complete Module 5 Problem Set 10 and Exit Ticket 10