

Math Lesson

Lesson Title: How Far Rulers Grade: Second
Content Standard: 2MD6 Relate addition and subtraction to length Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2... and represent whole-number sums and differences within 100 on a number line diagram. 2OA2 fluently add and subtract within 20 using mental strategies. By the end of grade 2, know from memory all sums of 2 one-digit numbers.
Materials: sentence strips, chart paper, pencils,
Shared Experience and procedure details: Set up: Cut the sentence strips in half (long way) so one sentence strip works for two students. Mark dots on the chart paper to show the zero line and ten line. Experience: Activity 1: Students will work with a partner to put tick marks on their sentence strip ruler. They will put one corner on the zero line and count up 10 spaces. Then put perpendicular tick marks on the ruler at each cross point. Each student will make their own ruler. They will label each tick mark (0 will be the beginning of the ruler and 10 will be the end of the ruler). *Teacher puts the first question on the board. How far is 9 coming from 4? Work with your partner and use both rulers to find the answer to the question. Allow time for partners to come up with the answer. A few students will then share on the Elmo, how they solved the problem. *Teacher distributes a second ruler labeled A-B (where 3 and 7 are at on the other ruler). Then put the second question on the board. How far is B coming from A? Students will again work with their partner to find the answer to the question. *Distribute the papers for them to continue the 5-step process. Activity 2: Give instructions for them to put both of your rulers together to make a longer ruler. You may need to change your numbers to make the new ruler. Pair two groups together into a group of 4. *Teacher puts the first question on the board. How far is 17 from 9? Work with your partner and use both rulers to find the answer to the question. Allow time for partners to come up with the answer. A few students will then share on the Elmo, how they solved the problem. * Then put the second question on the board. How far is 15 coming from 3? Students will again work with their partner to find the answer to the question. *Distribute the papers for them to continue the 5-step process. Activity 3: Another possible lesson is to do this again with multiples of 10.
Possible Picture: The rulers, the chart paper, tick marks, lining up the rulers to measure, all three rulers, numbers

Math Lesson

Feature Talk:

spaces, numbers, **start**, **end**, ruler, zero, ten, how far, measure, precise, units, **distance**, equal parts, A-B, counting, lined up, direction, compare

Feature Sentence:

9 is 5 spaces, coming from 4.

Possible Symbolic Representation:

$$9 = 5 + 4$$

$$4 + \underline{\quad} = 9$$

$$4 \rightarrow 9 = 5$$

$$4 \leftrightarrow 9 = 5$$

Written By: Lee, Monica, Cindy, and Stephanie

Date: 1-9-18