Instructional Unit Title: Keeping Track

Mathematics 1st Grade

The teacher may read a book (e.g., *Measuring Penny* by Loreen Leedy) to begin a discussion about all types of measurement (e.g., length, time, weight) so that students can begin to see measurement used and described in a variety of ways. The teacher may provide string (or some other nonstandard measuring tool) to students and demonstrate how to compare the string to objects in the room so that students can practice using the words longer, shorter or same length. The teacher may use the student work from the previous learning experience so that students can create comparison statements by indirectly comparing objects in relation to the string (e.g., The pencil is longer than the crayon because the pencil was longer than the string and the crayon was shorter than the string).

The teacher may provide a context, which requires a standard unit of measurement (e.g., needing a fence for a garden) so that students can begin to comprehend the need for standard units of measurement.

The teacher may create numberless rulers so that students can begin to understand how rulers facilitate accurate measurement (i.e., eliminates gaps and overlaps). The teacher may use a one handed clock to discuss the position of the hour hand at hour and half hour increments so that students can connect the concept of time to measurement. The teacher may have students jump along a number line (on the floor with marks (no numbers) at each one-foot increment) so that students can begin thinking of measurement as a distance traveled concept.

The teacher may provide a context for measuring an object so that students can begin to understand the need for accuracy when finding the length of an object.

PERFORMANCE ASSESSMENT: An educational company has hired you as mathematical designer to create a ruler for other first grade students that can be taped to their desk or table and set of directions for using the ruler. You will be provided with cardstock and two one-inch squares. The one-inch squares can be used to create individual one-inch unit marks on your ruler. Your goal it to create a ruler that will help students measure with accuracy and precision.

This unit was authored by a team of Colorado educators. The unit is intended to support teachers, schools, and districts as they make their own local decisions around the best instructional plans and practices for all students. To see the entire instructional unit sample with possible learning experiences, resources, differentiation, and assessments visit <u>http://www.cde.state.co.us/standardsandinstruction/instructionalunitsamples</u>.