

ACTIVITY 8.4

How Long Is the Teacher?

Explain that you have just received an important request from the principal. She needs to know exactly how tall each teacher is. The students are to decide how to measure the teachers and write a note to the principal explaining how tall their teacher is and how they decided. Next, explain that it may be easier if you lay down and students measure how long you are instead of how tall. Do this at several stations around the room. Have students make marks at your feet and head and draw a straight line between your "head" and "foot."

Explain that the principal says you can use any ONE of these things to measure with. (Provide several choices. For each choice of unit, supply enough units to more than cover your length. Be aware of the numbers that will result so be sure to use units that are at least 6 inches long.) Put students in pairs and allow them to select one unit with which to measure.

The value of the last activity will come from the discussion. Good questions include "How did different children measure?" "Did students who measured with the same unit get the same answers? Why not?" "How could the principal make a line that was just as long as the teacher?" In your discussion, focus on the value of lining units up carefully, end to end. Discuss what happens if you overlap units or don't stay in a straight line.

Repeat the basic task of "How Long Is the Teacher?" with other measuring tasks, each time providing a choice of units and the requirement that students explain their measures. It is always helpful if the same lengths (heights, distances around) are measured by several pairs of students so that possible errors can be discussed and the measuring process refined. The following similar activity adds an estimation component.