

How Many Pencils Tall?

NAME _____
DATE _____

In this activity, you will measure a large or tall item using non-customary units of measure.

NOTE: You will not determine the length using customary units (such as centimeters or inches) of any objects in this activity.



Follow these instructions to fill in the measurement table below.

- Determine what large object in the classroom you will measure. It could be a door, a person's height, or the distance between the floor and the bottom of a window.
- In Column C, under the LENGTH OF BIG OBJECT heading, fill in the blank with the name of the object you will measure.
- Choose your four measuring units. The smallest one could be a paper clip or an eraser. The largest could be a book or a shoe.
- Write the shortest of your four measuring units in the first row of Column A. Then fill in the rest of Column A with the descriptions of your other measuring units.
- In Column B, notice that the length of the first measuring unit is 1. This is because the length of this measuring unit is our unit of measure.
- Measure how many times the length of the small unit of measure is needed to get the lengths of the other measurement units. For example, if you have an eraser as your shortest unit of measure and your pencil is $2\frac{1}{4}$ times as long as the eraser, then put $2\frac{1}{4}$ in Column B for the length of the pencil.
- To fill in Column C, determine the length of the big object in terms of each of your four measuring units.

COLUMN A	COLUMN B	COLUMN C
DESCRIPTION OF MEASURING UNIT	LENGTH OF MEASURING UNIT	LENGTH OF BIG OBJECT
	1	

- Graph the data points from the table above, using Column B for your x -values and Column C for your y -values.

