



## More About Math

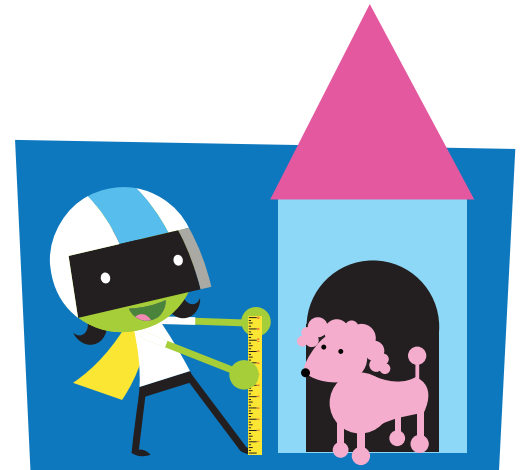
### Background for Leaders

Children in first and second grades should be aware that objects have “measurable attributes” such as length, height, weight or mass and temperature. They should be able to make measurements and comparisons for each attribute. This unit will help 6- 8-year-old children develop skills for measuring three of those attributes: length, height and temperature.

### Measure Lengths and Heights

Often the first experience with measurement is with non-standard units of measure. Non-standard units are groups of objects such as crayons, paper clips or connecting cubes that have the same size but are not typically used to find length. As children use the units to measure length they should lay them end-to-end next to the object being measured, with no spaces in between, and then count the number of units used to measure the length of the object. This method is useful when introducing measurement concepts to young children because it provides a method to compare lengths and estimate measurements.

As children’s understanding of measurement becomes more sophisticated, they will measure with standard units like inches or centimeters, using rulers, yardsticks and meter sticks. Make children aware that measuring with standard units provides more accurate measurements.



### Measure Temperature

Children like to make connections when they learn something new. For this reason children will notice similarities and differences between a ruler and a thermometer when temperature is first introduced. Both a thermometer and a ruler include number scales but are used to measure different attributes (thermometer measures temperature while a ruler measures length). Another difference is that rulers are read horizontally (left to right), while thermometers read vertically (up and down).

Young children will be able to compare temperatures easily by feel (hot, warm, cool, and cold) but they need to learn to read a thermometer and put those temperatures into context in order to know what temperature classifies as cold. Having children track the temperature in their own environment gives them a great gauge of what hot, cold, warm, and cool feel like, especially over long periods of time. Keep track of temperatures on a calendar and occasionally ask students, “What was the hottest day this week?”; “Which was the coldest day?” and “What is the difference between the coldest and the hottest day?”