

One Page Resource: Measuring with Pre-Schoolers

Adapted from Raising Readers: Exploring measurement together, Preschool. www.raising-readers.org.

Why measure?

Measuring is an abstract concept for preschoolers, but young children are naturally interested in measurement, and they want to answer questions in their daily lives like "Am I taller than you?"

Preschoolers can learn measurement skills when teachers provide hands-on activities, while stressing the reasons behind why various things are measured.

Why do we measure? To compare items, to track changes, to build or make certain things. Recipes are used to measure ingredients, so a cake always turns out a cake.

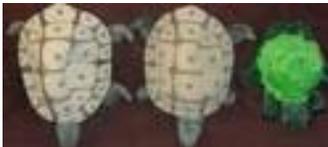
Can preschoolers use rulers, measuring tapes, scales, clocks?

Young children are not expected to have accurate measuring skills such as using a ruler to measure an object in inches. Instead, they are expected to understand and use general measurement words and concepts such as (same/different, longer/shorter, louder/softer, harder/softer, heavier/lighter, full/empty, etc.).

Teachers can encourage children to explore and play with both standard (rulers and scales) and nonstandard (yarn and hands) units of measurement.

Essential Indicator 11: Demonstrates emerging knowledge of measurement.

Guiding and supporting children along the rubric scale

<p>Not Yet Demonstrating Compares using language or gestures related to size (i.e., bigger, taller, longer, shorter, smaller)</p>	<p>Provide sorting activities</p> 	<p>Vocabulary words: longer/shorter, louder/softer, harder/softer, bigger/smaller, taller/shorter, heavier/lighter, empty/full, etc.</p>
<p>First Steps Identifies objects that are similar in size</p>	<p>Identify objects of same size</p> 	<p>Vocabulary words: same/different, similar, alike, etc.</p>
<p>Making Progress With assistance, makes direct comparisons of length, weight, volume, height or area of materials or objects in the environment</p>	<p>Have children explore a scale</p> 	<p>Questions to ask: Which is heavier? Why do you think that is? How can the scale be balanced or the same on each side?</p>
<p>Accomplishing Uses measurement to explore length, height or weight, using standard or non-standard base of measurement</p>	<p>Have children measure height with blocks</p>  <p>Model saying: I am as tall as two big blocks.</p>	
<p>Exceeds Expectations Uses appropriate vocabulary with adult assistance to describe length, height, weight and time</p>	<p>Cut different-sized playdough and measure</p> 	<p>Model standard language: inches. Point to and count numbers on ruler.</p>

Measurement terms

- **Length** (how long or tall something is)
- **Capacity** (how much something holds)
- **Weight** (how heavy something is)
- **Area** (how much space is covered)
- **Temperature** (how cold something is)
- **Time** (how long it takes to get somewhere)

Measurement concepts

- **Comparison** is finding a relationship between two things or a group of things (My shoe is smaller than Daddy's shoe).
- **Ordering** refers to comparing and ordering objects and events according to measurable attributes (placing 3 or more cars side by side to determine which is bigger).
- **Estimation** is a "good guess," meaning it is based on something we know and not just a random idea. Estimation is valuable in situations where exact measurement is not necessary or even possible (estimating