

*Measurement Sense—understanding different units of measure and relating them to common objects...For example, "You would measure a desk's length in: millimeters, centimeters, inches, feet, yards, or meters. Miles and kilometers would not be appropriate, nor would grams, pounds, or milliliters."

- € Have children measure everything in **all types of units**. The point is to give kids as many experiences as possible so they have a point of reference that they can picture and relate to. Here are just a few examples of things to have them measure--
 - bed, desk, kitchen table in centimeters, inches, feet, yards, millimeters
 - perimeter and area of bathroom, bedroom, living room, kitchen, back yard, front lawn in feet, yards, meters
 - volume of bathtub, refrigerator, "kiddy pool", neighborhood pool, rectangular food containers of various sizes (13 x 9 cake pan and Tupperware sandwich box) in cm, inches, yards, feet, meters as appropriate. How many cm is a 13 x 9 pan?
 - body parts in inches, cm, and mm. How many cm is your thumb? How many inches?
 - grocery items on the scales in the produce department in grams, ounces, kilograms, pounds (Every shopping trip, give the children weighing tasks..."Please choose 3 pounds of apples, or Please get between 36 and 48 ounces of broccoli.")
 - blocks to the park...how long is each block? Are they basically the same, or very different in length? In what unit is it easiest to measure blocks? (mm, cm, inches, feet, yards, meters, miles, kilometers)
- € Each day, have your children measure some common object in the home, yard, neighborhood and record the results in a notebook. At the end of the week, do an "I spy" type game using those measurements. For example, "I'm thinking of an object that is 40 inches wide and six feet long. What is it?" (the child's bed)
- € Using measurements students have made, describe the objects dimensions in as many ways as possible. For example, using the bed measurement above, list as many ways to describe the size of the bed, in as many measurements as possible. 40 inches wide and six feet long, 40 inches wide and 60 inches long, 3 feet, 4 inches wide and 1 2/3 yards long, etc. Students can use rulers/tape measures to look at to help them convert from one unit to another.
 - Find body parts and common objects to use as "standards" for basic units. For example, the middle portion of our index finger is about 1 inch long. (Don't believe me? Measure it. ☺) What body part is about 1 cm long? 1 foot? How do seamstresses measure a yard? (From the tip of an adult's nose to the end of the fingertips when the arm is out-stretched horizontally is about a yard.)
 - You can also discuss that adults will often use their body parts for reference (i.e.—a woman's span from thumb to end of pinky finger when hand is spread out is usually about 8 inches and a man's is about 9 inches;), and when we as adults might use them. Have your child(ren) compare their measurements to yours. In real life, we use these to **estimate** quite a bit (i.e.—the desk is about 8 of my hand spans so is about 64 inches long).
 - The more kids can "picture" or relate to units of measure, the more they'll be able to solve problems using these units.
- € Walk the perimeter of your neighborhood and talk about going around the neighborhood. Walk the perimeter of a park (the sidewalk usually goes around the perimeter). Talk about the "distance around" as you walk. Use ribbon to decorate the perimeter of greeting cards. How do you know how much ribbon is needed? Measure the perimeter of the back yard. The fence surrounds the Perimeter. The grass is the "area" in which we play. Give children visual cues of perimeter (the distance around) and area (the space inside). Perimeter is outlined with you finger as you draw around the outer line. Area is shown with a flat hand spreading out to cover the entire space.
- € Bake a cake and spread the area of the cake with icing. Decorate the perimeter (outer edge) with a favorite candy. (What is the volume of the cake? That's everything that you get to eat!!!! Yummy!)

- € At the grocery store or in the kitchen, compare ounces, liters, quarts, pints, cups... Why are some containers labeled in ounces and others in liters? How big is the difference between a quart and a liter? Which one is bigger? Prove it to me...
- € Weigh things on a bathroom scale. If you don't have one, borrow one for a week, or find one at a garage sale. Find a common object that weighs about 1 pound, 2 pounds, 5 pounds, 10 pounds. (Or, use the produce department at the grocery store. Feel a 1 lb bag of carrots and compare it to a two pound bag of carrots. Lift a 5 pound bag of potatoes, or a 5 pound bag of flour. Compare it to 10 pounds.)
- € Have children weigh themselves at the grocery store pharmacy (almost all have a scale). How many kilograms do they weigh? Which is bigger, a pound or a kilogram? How do you know? About how many kilograms are in 1 pound? About how many pounds are in 1 kilogram? If someone weighed 100 pounds, how many kilograms would they weigh?
- € What types of things are weighed in tons? ounces? pounds? grams? Find examples of each and draw pictures in a notebook or on index cards to use as personal references. Do an "I spy" game using weights. "I spy an object that is approximately 2 tons. What is it?" (Would it be the dog, the lawnmower, the neighbor, or his car?)
- € Measure, compare, and play guessing games consistently.
- € Use math vocabulary in ordinary everyday life.
- € Have fun measuring and learning about measurements.