

All About Measurement

What Is Measurement?

Measurement can tell us about the size, weight, or amount of something. We can measure with standard units, such as inches and pounds, and using tools such as rulers and weigh-scales. We can also measure using objects around us. For example, we can measure the length of a stick by lining up pennies on the floor next to it.

Why Is Learning About Measurement Important?

People need to measure things every day, such as: “How far is the walk to school?” or “How much flour do I need to make a cake?” Some areas of math and science also use measurement to solve problems. Knowing standard units and how they are related helps us communicate about the things we measure.



The butterfly is smaller than the leaf. The leaf is wider than the stick.

What Do Children Need to Know About Measurement

Children need to understand:

- **What to measure and why.** If we want to know if a toy will fit inside a box, we would measure the length, width, and height of the toy, but not the weight.
- **What kind of units to use.** We need to know whether big units or small units would be more useful. Children could measure big toys using their hands, but they might need to use a ruler marked with centimeters to measure small toys.
- **How to use measurements.** Children need to know how units or tools of measurement can be used to get an accurate answer. They can line up the tool with the edge of the toy and make sure there aren't any gaps or overlapping units.

How Can We Help Children Learn About Measurement?

Practice measuring and talk about comparing things in daily life.

Babies and Toddlers

- **Talk about the sizes of objects using words like *bigger*, *smaller*, *longer*, and *heavier*.** For example, “My shoes are bigger than your shoes!” or “Which stick do you think is longer?”
- **Talk about what comparisons mean.** When you make

comparisons, expand on them and give extra details. When your child says, “Your shoes are *bigger* than mine,” you can give more information by using the opposite word: “And your shoes are *smaller* than mine.” Or be more specific: “My shoes are *longer* than yours!”

Preschoolers and Older Children

- **Measure things in different rooms.** Your child can use household items, like string or pencils, to measure. They can also use their own hands or arms.
- **After measuring, compare.** “Which object was widest? Were any objects taller than you?”
- **Measure the same object in different ways.** Ask your child to measure a stick using pennies and then using quarters. “How long is the stick when you used pennies?”

What about when you used quarters?” Ask your child why the measurements are different.

- **Use the same measurement tool in different ways.** Put an object in the middle of the ruler and ask your child how long it is. Or put the object at the end of the ruler so that it's lined up with the higher numbers. This helps children understand what inches or centimeters really are, instead of just counting the numbers.