

## DOING SCIENCE IS:

**Measuring & categorizing**  
**Using tools**  
**Making observations & predictions**  
**Exploring**  
**Problem solving**

### WHILE PRACTICING SCIENCE SKILLS WITH YOUR CHILD:

**Model how to use tools:**

*Make sure to fill measuring cups evenly to the top!*

*Lock the tape measure in place to compare the lengths of different objects.*

**Ask testable questions:**

*Which feels heavier: a ½ cup full of sand or a ½ cup full of blocks?*

*How many ½ cup scoops can the liquid measure hold?*

*Whose shoe is longer from heel to toe?*

**Make predictions:**

*Which way will this side of the scale move when we add sand: up, or down?*

*Whose hand can hold more sand?*

**Narrate actions to introduce and define new vocabulary:**

*You're filling the liquid measure with sand to see how much it can hold—its volume!*

*We can compare the mass of materials on either side of the balance scale.*

**Pose challenges:**

*Can you make both sides of the scale float off the ground?*

*Can you use the tape measure to find something that is the same height as you?*

*How many of your steps does it take to cross this room?*

**Repetition is your friend!**

Doing the same thing over again helps kids understand variability and begin to replicate experiments.



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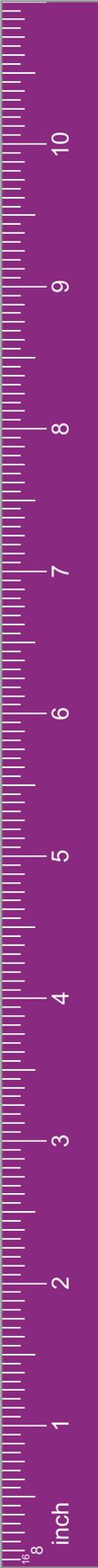
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## MEASURE TOGETHER!

**Try extending play by adding a measurement challenge!**

**Example Activity:**

### **Paper Airplanes**

Help your child fold and throw a paper airplane. How many heel-to-toe steps does it take to get from where you were standing to where the plane falls? What other tools or units might you use to measure how far your airplane traveled? Try using a ruler or tape measure to determine the distance from the plane's starting point to its landing site in inches rather than steps.

**Bonus: Challenge yourselves to throw the plane farther! It may help to change your airplane design.**

**Observe dimensions and distances in the world around you.**

**Example Activity:**

### **Rocks in Water**

Work together to collect and sort rocks of various shapes and sizes. Notice the similarities and differences between them. What happens when you drop the rocks into a container of water? How many rocks of each size does it take to make the container overflow? Is there a difference between rocks of different sizes?

**Try this activity outside in a bucket or kiddie pool for hours of summer fun!**

### **MORE RESOURCES**

**PBS Kids Measure Up!**

[pbskids.org/apps/pbs-kids-measure-up.html](https://pbskids.org/apps/pbs-kids-measure-up.html)

**Collaborative for Early Science Learning - Home Resources**

[sciencenter.org/resources-for-home](https://sciencenter.org/resources-for-home)

**National Association for the Education of Young Children - For Families**

[naeyc.org/our-work/families/science-nutrition-safety](https://naeyc.org/our-work/families/science-nutrition-safety)

**Exploratorium - Cooking Equivalents and Measures**

[exploratorium.edu/food/measurements](https://exploratorium.edu/food/measurements)



**EXPLORE SCIENCE**



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