



EXPLORING SCIENCE PRACTICES

Early Explorations

Try this with your baby, toddler, or preschooler!



Encourage your child to look at and touch each of the surfaces on the table. **Ask early learners:** *How does it feel? Is the felt soft or hard? Which is shinier, the felt or the foil?*



Help your child drop or spray water onto each surface. **Ask:** *What do you notice? Where does the water go?*



Together with your child, use eyedroppers and sponges to move water around. **Ask:** *How does the water flow on each surface? What do you notice about its shape?*

Exploring materials, using tools, and making observations are important science skills.

Very young children (ages 0–4) use these science process skills to explore and understand our world. These skills include categorizing, measuring, predicting, and problem-solving.

It's easy to make building science process skills a part of everyday play and routines. *Categorize* fruits and veggies into color groups at mealtimes. Cut up an image or drawing and use *problem-solving* skills to fit the pieces back together. Blow bubbles outside to *observe* (and later *predict*) which way the wind will take them. Early learners can draw upon multiple skills simultaneously, using tools and exploration to inform categorization, prediction, and observation. **Make sure to grab one of our bookmarks with more ideas for science explorations that you can do together!**



Simple activities allow children and caregivers to do science together!



NASA researchers use science process skills to study Earth and space.

Practicing science process skills early and often is important for children's brain development. Early childhood experts emphasize the importance of supporting and scaffolding the natural tendencies of infants, toddlers, and preschoolers toward curiosity, exploration, and questioning. With guidance, their early efforts to understand how the world works can mature into the sophisticated scientific practices used by trained scientists and other scientifically literate adults. Supporting your child's development begins with identifying and scaffolding their innate approaches to investigating and making sense of their surroundings. Research shows that when children practice science process skills at an early age, they're better able to ask questions, draw and revise conclusions, and identify or replicate patterns later in their development. These are important skills for learners in all interest areas!

Practicing science process skills early and often is important for children's brain development.

Early childhood experts emphasize the importance of supporting and scaffolding the natural tendencies of infants, toddlers, and preschoolers toward curiosity, exploration, and questioning. With guidance, their early efforts to understand how the world works can mature into the sophisticated scientific practices