



## Little Scientists

When infants wave a rattle back and forth and it makes a sound, they are being scientists. They are looking to see what happens to something when they manipulate it. Infants need to be able to explore and make connections between their actions and the reactions they cause. This cause-and-effect relationship can be explored by infants crying with the expectations of their caregiver picking them up or by a toddler dumping water out of a cup to see what happens. Exploring cause-and-effect helps infants and toddlers understand how things work and how people work. By understanding cause-and-effect, children can problem solve, make predications, and realize how their behavior impacts others. Responsive caregivers provide a safe, secure, and predictable environment that is set up with interesting items that infants can fully explore without interruption.



**What  
the child is  
doing is the most  
important thing  
at that moment**

Provide infants and toddlers with the materials or opportunities to help them explore cause-and-effect:

- Splash hands in water and notice how his face gets wet
- Items they can pull out of a container, such as a scarf in a tissue box
- Push button toys to watch the figure pop up and push down again
- Jack-in-the-Boxes
- Put objects, like cube blocks in a clear container and watch them fall out, and fill again
- Spoons to bang on pots and pans or boxes
- Toys that can be dropped from different heights and make different noises
- Build with blocks, knock them down, and build again
- Talk about what happened to a peer's bandaged knee
- Ask prediction questions about what he thinks will happen next in a story
- Wheeled toys to pull or push around
- Baskets and bins to dump and fill

From: The California Department of Education (2009). California Infant/Toddler Learning and Development Foundation.