



Early Learning Areas / Science

Science in Your Home



Dear Debi,

I have a preschooler at home with me and I'd like to know if there is a way of teaching her about science without going to a museum or spending hundreds of dollars on a microscope or telescope?

– **Lucy Nguyen**

Debi's Tips



Debi Gutierrez

Host

- Science is everywhere
- Provide a variety of materials
- Ask open-ended questions
- Talk to kids every day about science

Expert Advice



Moises Roman

UCLA Early Care & Education

Lucy doesn't need to buy expensive equipment in order to teach science to children. She can use common household items to stimulate scientific ways of thinking. Items like containers with lids are great for children so they can collect items and talk about what they found. Bugs are another great way to help kids with science. In addition to exploring scientific concepts, kids are developing language as they describe what they're looking at.

Science should be an everyday activity. Science is all around us. The important thing is to build on these opportunities when you can. Opportunities arise in daily routines that offer science experiences, such as making a meal. When parents or providers are cooking, they can talk to the child about what they're making and what the recipe is. Following directions, measuring ingredients, predicting the outcomes and drawing conclusions are all concepts incorporated in a simple recipe.

For parents who think that teaching science is too hard to do, remember that science doesn't have to be complicated. It's something that's simple and should be made tangible for children to experience. Parents are constantly teaching science when they don't even know it.

You should provide a variety of natural materials for kids to explore. Exposing children to their outdoor environment and all that nature has to offer is a good way to provide natural materials for children to think scientifically about.

Parents should provide age-appropriate materials that are relevant and tangible to children. They should provide things that encourage children to think. Things that are open-ended, such as measuring tools, collecting tools and observation tools.

Finally, remember that science is all about asking open-ended questions. Open-ended questions are essential to the exploration and investigation component of science for young children. With open-ended questions, we can guide learning to be more beneficial to the overall development of the child, versus closed questions that only get you a one-word answer.

Child Care provider Comments



Theresa Quary

Mother of two kids,
Daughter has Autism

Some of the best science-related activities can be found in your own backyard, just by observing nature. A lot of children aren't even ready for a museum experience, so there's no need to spend a lot of money. My kids love the book "What makes a Rainbow," so we went in the backyard on a sunny, hot day, we turned the water hose on, and made an artificial rainbow in the air. You could see the colors of the rainbow in the water as it misted in the air. We talked about the prism of colors and it was so much fun.



Maria Velarde

Grandmother of one

I would tell Lucy there's no need to spend hundreds of dollars to teach a child science. There are many things in your house or backyard that you can use to teach science. I love to go out in my backyard with my grandson, Elijah, because he loves to play with the water hose. He loves to help me water my plants, and loves to garden with me. During the spring he helped me plant some seeds, helped me water the plants and a few months later he's even seen the bulb coming out of the soil. So in the process he's learned about how plants grow.



Verdis Ferraro

Child care provider for 23
years

Science is all around you every single day, inside, outside, everywhere. Watching things change form liquid to solids, watching ice melt and water freeze – that's all science. You can take a magnifying glass in the yard and look at trees and bugs. Science is about observation. If you want to teach them simple cause and effect, you can do a lot of experiments simply using salt, water, oil, baking soda and vinegar.

One thing we did was called "Paper Holds Water." You fill a cup to the brim with water and put an index card on top of the cup and quickly flip it over, let go of your hand and the index card holds the water in the cup. It's upside down and the water stays in the cup.

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