

Science Begins At Home: Children are Born Scientists!

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The next time you feel frustrated from your child asking “*why, why?*” for the sixth time in an hour, appreciate that s/he is developing the skills it takes to becoming a scientist one day! Children are driven by a passion to understand the world they live in and think that you, as their parent, hold the key to all of that knowledge.

This sounds like a daunting responsibility, but just sharing in their excitement is a great start. You do not need to know all the answers or have studied science to promote curiosity and a love of learning!

Even if you consider yourself science-shy, there are many simple ways to enjoy fun science learning at home. As your child’s first teacher, the secret to science and many other schools subjects and, perhaps, life skills in general, is to nurture curiosity - encourage your child to be inquisitive and make unbiased observations.

If your child asks questions that you don’t know the answer to, make finding that answer a form of family fun. That could mean a trip to the library, some shared time on the internet or simple experiments at home. Encourage your child to keep a diary of their questions, answers and observations.

Help your child explore their particular interests at home and create experiences that use all the senses. Take the time to encourage playful exploration and discussion. This support will go beyond developing science skills but also encourage reading, language, creativity and a general enthusiasm toward learning.

Make your child’s environment a comfortable place to learn, rather than scheduling in science or other learning activities. Most parents unconsciously encourage science learning as you go about your daily routine. Think about all the questions you answer daily - questions about the bug at the park, the appliances in the kitchen or the work being done at construction site you passed.

One way to encourage inquiry is to have an area in your home where your child can freely explore current interests. Perhaps a table where things can be set up, taken apart or a place to put things under a magnifying glass. This area can also display items your child is collecting – rocks, insects, leaves. You can encourage different collections as the seasons change. Perhaps have a journal so that your child can draw or record observations.

It is also important to allow your child to make a mess while they are discovering the world around them. You are letting them know that exploring is more important than clean clothes and a clean house. Of course, set limits. You can do this by designating discovery zones, placing newspaper on the table or floor during discovery time, let them know which clothes are best for activities and provide them with containers so your best china doesn't end up housing a bug collection!

Here are a few suggestions to get you started at discovering the many wonders of science at home and help enrich their science experience at school:

- 1) Recognize and capitalize on your child's questions that encourage thinking and discovery.
- 2) Remind yourself that science is everywhere! Explore science in everyday situations in the house and backyard.
- 3) Be mindful of the many scientists at work in your community – your pharmacist, your hair colourist, your dentist, your baker – all use science in their everyday job functions.

Science can be random, messy and filled with mistakes that can lead to discovery! Children inherently have many of the same characteristics as scientists: curiosity, creativity, skepticism and open-mindedness. When children are allowed to use these traits in their environment, they are truly being scientific!

Science Alberta Foundation is a non-profit organization committed to increasing science literacy and awareness. Our programs motivate children, youth and families to embrace lifelong science and technology learning. We are helping to create tomorrow's knowledge workers and instill an appreciation of science in a new generation of Albertans. www.sciencealberta.org