Science at Home? Yes, You Can!

What is *science*?

According to *www.dictionary.com*, one definition of science is: "The observation, identification, description, experimental investigation, and theoretical explanation of phenomena."

It sounds technical, but it's really not! Phenomena is everywhere -- from how plants grow to the chemical reactions that take place when cooking, to which toys sink or float in the bathtub. Science is a way for children (and adults) to learn about the world.

How can parents/guardians encourage children's science learning?

Children use scientific skills in their daily lives through play: they observe phenomena in the environment; identify and classify objects; make predictions and try to explain occurrences. Parents/guardians can easily encourage the development of these skills and instill enthusiasm for discovery in their children of all ages.

MAKE A HOME "SCIENCE CENTER"
Put a few "tools for exploring" in a box, such as a magnifying glass, ruler, and some small objects to examine up close, for example, a bag of dirt, sand, seeds, dried flower petals, grains of rice, newsprint, or whatever! Ask them, "What do you see?" Include a small notebook and pencil for children to record their observations, for example, "*Up close, the sand is many different colors*." (Adults can write down younger children's observations.) Older children may enjoy taking apart broken household gadgets to explore how they operate.

GET THEM TO NOTICE THEIR SURROUNDINGS.
Oftentimes, people tune out what is happening around them. Science is about **tuning in.** While on a walk, ask your children, "What do you hear?" They may be able to **identify** the faint sound of an airplane, birds, or the wind rustling through trees. Try this activity inside the home as well. When everyone stops talking, and listens, you may notice the hum of the refrigerator, or a ball bouncing outside. Similarly, call attention to smells (flowers, freshly cut grass), objects they see (clouds in the sky), and what they feel (the wind on their face).

TRY SIMPLE SCIENCE EXPERIMENTS.
There are many Web sites devoted to simple science experiments parents/guardians can do with their children of all ages at home -- from making a sun dial to exploring simple laws of physics. During down time, instead of turning on the TV, visit some of these sites:

- **www.tryscience.org/parents/se_1.html**
- **www.exploratorium.edu/science_explorer/**
- **www.bbc.co.uk/education/dynamo/lab/**
- **members.ozemail.com.au/~macinnis/scifun/miniexp.htm**

Your local library may also have some books to check out on science experiments.

When doing experiments together, provoke children's thought processes and science learning by asking questions:

What do you think will happen? (PREDICTING)
What is happening? (OBSERVING)
Why do you think that happened? (EXPLAINING)

Most experiments offer an explanation to the phenomena, but some may require further investigation or research. Extend the learning through reading books or articles on the Web.

☆☆ **PARENT POINTERS:** Be sure to note the recommended age-range before attempting a science experiment with children. Keep in mind that even the simplest science activities will require adult supervision for safety reasons. Most of all, have fun!

Sources: This tip-sheet was inspired by *At-home science activities for children and families* on the Parent Page at *www.tryscience.org* and *Discovering Science at Home* by Cristina Latici at *www.discoveryschool.com.*

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