

## Parent-Family Engagement Tips-Science

Every person needs to understand science in order to make informed decisions about health, safety, and citizenship among others.

It is important that your child start learning early and at home. A good way for you to begin the learning process at home for your child is by sharing your own interest in science.

In everyday interactions with your child, you can do many things to help her/him learn more about science. The following are a few ideas:

- **Observe the growing process.** How long does it take for a dandelion or a flower to bloom? Draw the parts of the plant and the changes observed.
- **Record the phases of the moon.** Watch the moon as it appears to change shape over the course of a month; write the dates in a journal-notebook, then draw and record the changes. Identify the phases.
- **Identify constellations.** Look for stars-constellations in the night sky. See if you can identify them.
- **Bake and cook together.** Follow a recipe with your child, pointing out each step in the process and allowing your child to participate in the measuring of ingredients. Talk about units of measure: teaspoon, tablespoon, cup, pound, etc. You can include talking about fractions in this process as well:  $\frac{1}{4}$ ,  $\frac{1}{2}$ , etc. Don't forget to talk about temperature. How many degrees are required to bake a cake or pizza, for example.
- **Care for plants together.** Solve the problem of a drooping plant. Too much or too little water? Amount of light? Insects? Fungus? Work together to try and save the plant by adjusting what it needs.
- **Explore mechanical objects no longer used.** Take apart an old clock or mechanical toy no longer used to see how it works. Try putting it back together.
- **Identify states of matter.** Watch icicles melt. Identify changes in matter...solid to liquid. Find other examples of solids, liquids, and gases and how they may change.. Would you like to increase the challenge? Talk about plasma.
- **Check out the animals.** Observe animals and their habits...pigeons, squirrels, butterflies, ants, or spiders, etc. How do their habits differ? How are they alike? Why do you think this is?
- **Walk and explore.** Go for a walk and talk about how the dogs (or birds or cats) that you see are alike and different. Do the same with trees and plants.
- **Learn more about building materials.** Discover what materials the buildings in your community are made of. Wood? Concrete? Brick? Granite? Steel? Glass? Talk about the reasons for using these building materials. Try building with safe objects around the house.
- **Check the temperatures and weather daily or weekly.** Check the temperature and weather patterns outside. Let your child draw a symbol on the calendar date that matches the weather. For example, today it is raining, so he/she will draw a raindrop on the date. Yesterday it was sunny, so we drew a sunshine symbol on that date. Several

businesses offer free calendars. In addition, some can be found online for printing. Throughout this process, talk about the weather, season, and the calendar. Make comparisons. How does the weather today differ from that of a week ago? What was the weather like two months ago? Predict...what will the weather be like next month? Why? In a state like MN, you can also talk about how the weather can really vary. Tune into the weather channel or TV news to check and compare your work.

Encourage your child to watch or observe closely, ask questions, make predictions, draw, journal, measure, give explanations, and seek more information through the Internet, by reading, etc. All these may seem basic, but they lend very well to the early learning of science.