BRAIN POWER NEWS

Parent Newsletter

Volume 1, Number 1

Welcome to the NIDA Junior Scientists Program

Your child has been working on the first module of the National Institute on Drug Abuse (NIDA) Junior Scientists Program. Geared to students in second and third grades, the program is made up of six modules introducing the following key concepts:

- The steps of scientific inquiry—observing, making predictions, performing experiments to test predictions, and making conclusions;
- The parts of the brain and how information is transmitted throughout the body;
- The differences between drugs used as medicines and drugs used for other purposes;
- The effect that nicotine and other drugs have on the body and the brain.

By teaching young children about how drugs affect the body, we can lay a foundation for students to make better decisions about their own health in the future.

This newsletter is designed to provide you with information so that you can reinforce at home what your child has been learning in school. Each module has a parents' newsletter that includes the following:

- The content of the module;
- Activities you can do at home;
- Additional resources;
- A suggestion for your child to share some thoughts through words or pictures.

We hope that you and your child enjoy working on the program together and that the knowledge gained now will serve your family well in the future.

continued

What Is Scientific Inquiry?

The term "scientific inquiry" sounds pretty sophisticated, but actually, it simply refers to a systematic way of approaching a problem. The four steps of scientific inquiry are:

- Observing the features of an object or phenomenon;
- Predicting what the object or phenomenon is;
- Experimenting to check the prediction; and
- Figuring out what the results mean.

Students used these four steps to figure out what a mystery goo was made of. This activity aligns with the *National Science Education Standards* (NSES), guidelines developed in 1996 by the National Academy of Sciences to help schools know what science information should be covered in kindergarten through high school. The standards stress the importance of using scientific inquiry as a tool for approaching and solving problems. Throughout the NIDA Junior Scientists Program, we will let you know how each activity fits in with the NSES recommendations.

Science at Home

Ask your child what he or she learned about scientific inquiry. Then try a science experiment with your child. Mix 1/3 cup of cornstarch and 1/3 cup of baking soda. What happens when you add water? Try it again, but add vinegar instead. What do your results tell you about the differences between water and vinegar? What do they tell you about the properties of the liquids? Try to use the steps of scientific inquiry if you can.

What Does Your Child Think?

Have your child write or draw a picture about something related to scientific inquiry.

Additional Resources

You and your child may want to try some of the science experiments included in some of these resources.

National Institute on Drug Abuse (NIDA)
www.drugabuse.gov, 301-443-1124
This Web site contains information about drug abuse and a section designed specifically for parents, teachers, and students.

National Clearinghouse for Alcohol and Drug Information (NCADI)
www.health.org, 1-800-729-6686
NCADI is the world's largest resource for information and materials concerning substance abuse. Many free publications are available here.

Science Series: *Kitchen Chemistry*. Monterey, CA: Evan Moor Educational Publishers, 1996. Includes activities and experiments that help students learn about the basic principles of chemistry with materials found in the kitchen.

VanCleave, J. P. *Chemistry for Every Kid: 101 Easy Experiments That Really Work*. New York: John Wiley and Sons, Inc., 1991. A collection of more than 100 chemistry experiments showing how chemistry is part of our lives.

Wiese, J. *Head to Toe Science*. New York, NY:John Wiley & Sons, Inc., 2000. Includes over 40 activities and experiments that teach kids about the human body.

Houghton Mifflin Science Center
www.eduplace.com/science
Links to science-based activities and lessons.

The Why? Files
http://whyfiles.org
Explanations for scientific phenomena discussed in the news.

Edible/Inedible Experiments Archive
www.madsci.org/experiments
Lists of both simple and more complex experiments.