

# BRAIN POWER NEWS

# Parent Newsletter

Volume 1, Number 2

# What Your Brain Can Do

Your child has just completed module 2 of the National Institute on Drug Abuse (NIDA) Junior Scientists Program. He or she put together a three-dimensional model of the brain, identified its four key parts, and learned about what each part does.

Our goal is to show children how amazing the brain really is. Most children this age know that the brain helps them think, but they don't realize that the brain is also responsible for just about everything else, too—from regulating heartbeat and breathing to controlling emotions and artistic expression. By teaching them about "Brain Power!," we hope that they will think twice about doing anything that might harm their brains.

# The Brain Is Truly Amazing

Here's a quick summary of what your child learned about the brain:

Part of the Brain	Function
Left hemisphere, cerebral cortex	Responsible for analytical thinking such as solving problems and comparing information needed to make decisions. It also is the brain's language center.
Right hemisphere, cerebral cortex	Responsible for artistic expression and understanding relationships in space.
Cerebellum	Controls posture, movement, and the sense of balance. Such activities as playing ball, picking up objects, and playing musical instruments fall under its control.
Brain stem	Controls heart rate, breathing, blood circulation, and digestion.
Limbic system	Responsible for emotions and also involved in memory and memory storage. Drugs can change how the limbic system works.

### Science at Home

Ask your child what he or she learned about the brain. See how many parts he or she can identify. Throughout the day, as you perform different activities together, ask your child which part of the brain is being used. Then ask your child to draw a picture of the brain and label it.



## What Does Your Child Think?

Have your child draw or write something about the brain.

#### Additional Resources

The books and Web sites listed below have more information about the brain.

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.

Friedman, D. Focus on Drugs and the Brain. Frederick, MD: Twenty-First Century Books, 1990. This book is part of the "Drug-Alert Book" series. It provides a good overview of the brain, neurotransmission, the effects of drugs on the brain, and addiction.

Rowan, P. Big Head! A Book About Your Brain and Your Head. New York: Alfred A. Knopf, 1998. An overview of the different parts of the brain. Includes detailed color pictures and transparencies.

Simon, S. The Brain: Our Nervous System. New York: Morrow Junior Books, 1997. An overview of the brain and neurotransmission, with a focus on the function of the brain. Neuroscience for Kids http://faculty.washington.edu/chudler/ neurok.html

This Web site contains information on the brain and neurotransmission, activities, experiments, pictures, and other resources for students and educators.

How Your Brain Works www.howstuffworks.com/brain7.htm Pictures and descriptions of the history of neuroscience and different parts of the brain.

Are We Unique?
http://sln.fi.edu/qa97/spotlight5/
spotlight5.html
This subpage from the Franklin Institute
Web site talks about the science of the
human mind.

Bill Nye the Science Guy www.nyelabs.com/splash.html See Episode #34 on the brain.

Brain Briefings
www.sfn.org/content/publications/
brainbriefings
This page is part of the Society for
Neuroscience Web site. It provides
scientific information on different parts of
the brain and brain disorders.