Hearing Colors, Tasting Shapes

If you listen to the blues and actually see the color, you might have synesthesia, a neurological condition in which senses mingle. Potential synesthetes can assess their perceptions at the Synesthesia Battery, a standard set of questions from neuroscientist David Eagleman of the University of Texas Medical School in Houston. Researchers can send subjects who might have their sensory wires crossed to the site and receive the test results by e-mail. >> www.synesthete.org

Around the Brain in 20 Minutes >>

Cocaine occludes the molecular pumps that clear dopamine and other neurotransmitters from brain synapses (right). As a result, the molecular signals jolt neurons again and again, producing euphoria. Students can learn more about how drugs tamper with synapses, how memory works, and other topics at The Brain From Top to Bottom, created by neuroscientist Bruno Dubuc of the Canadian Institutes of Health Research. The primer’s eight chapters, which come in three levels of difficulty, explore not only the molecular and cellular mechanisms behind brain functions but also their psychological and social ramifications. In the pleasure and pain section, for example, you can step back for an overview of philosophers’ thinking about these two sensory extremes. >> www.thebrain.mcgill.ca/flash/index_d.html

Wombs With a View

The placenta allows a mammalian mother to speed nutrients to her fast-growing embryos. Pathologists, evolutionary biologists, and other researchers can absorb information about the organ at Comparative Placentation from Kurt Benirschke, a professor emeritus at the University of California, San Diego. For more than 140 mammal species—from the house mouse to the African elephant—the site describes placental anatomy, gestation, implantation, and abnormalities. Accounts feature a wealth of images such as the cross section at left, which shows a 17-day-old mouse fetus in the uterus. >> medicine.ucsd.edu/cpa