Comparing Brain Images

Abstract
A color-by-number comparison of PET scan images showing activity in a drug-free brain and the brain of a cocaine addict. For use with PET images on the Drugs Alter the Brain’s Reward Pathway page in The New Science of Addiction: Genetics and The Brain module on our website (url above).

Learning Objectives
Brain activity diminishes with drug use.

Instructions
1. Log on to The New Science of Addiction: Genetics and the Brain module (url above) and visit the Drugs Alter the Brain’s Reward Pathway page.
2. Under the Changes Last Long After Use heading, click on the mouse graphic to alternate between PET images of a normal functioning brain and the brain of a cocaine addict.
3. Color the normal-functioning brain activity on page S-1 using the appropriate PET image as a guide.
4. Color the brain activity of a cocaine addict on page S-1 using the appropriate PET image as a guide.

Hint: The numbered areas in the brains on page S-1 correspond to the following colors:
1 = red
2 = yellow
3 = green
4 = light blue
5 = dark blue

Note: red and yellow indicate areas of high activity.
Use the morphing PET images on: http://gslc.genetics.utah.edu/units/addiction/drugs as a guide to color in the normal-functioning brain and brain of a cocaine addict below.