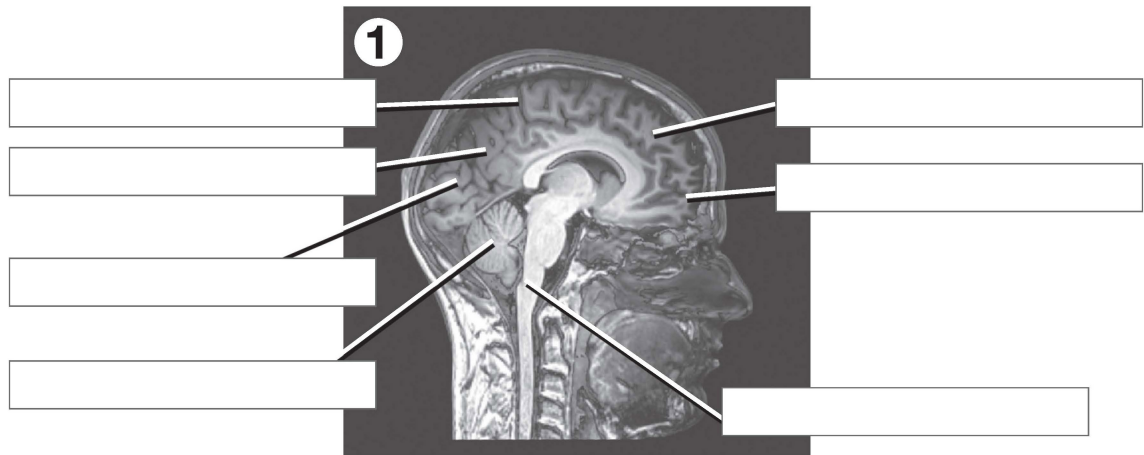


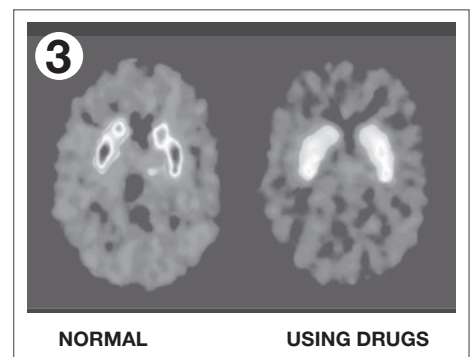
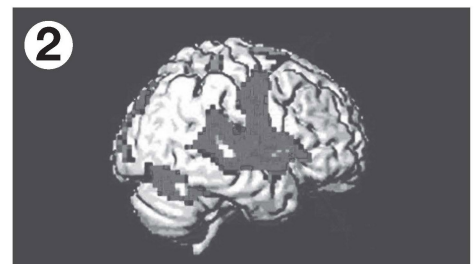
Can You Think Like a Neuroscientist?

Use the information from “Mapping the Brain” and the real brain scans below to answer the questions. Record your responses on a separate sheet of paper if necessary.

1. **a.** The image below shows regions of the brain. Compare it with the scan in the article. What kind of information about the brain does it provide (structure, function, or cellular)?
- b.** Label the highlighted regions of the brain.



2. The image at right shows brain activity levels while a person is laughing. What type of scan is shown? What kind of information does it provide?
3. **a.** These images (below right) were created using radiotracers that attached to cells in the brain. What type of scan is shown? What kind of information does it provide?
- b.** Dopamine is the brain chemical that helps us feel pleasure. Dopamine levels are higher in the brain on the left. What does this show about how using drugs affects the brain?
4. Which imaging tool would you use to learn about how the size of the prefrontal cortex changes as kids grow into adulthood? Explain your answer.



5. What type of imaging technique would you use to find out which areas of the brain are active when a person considers a risky decision? Explain your answer.