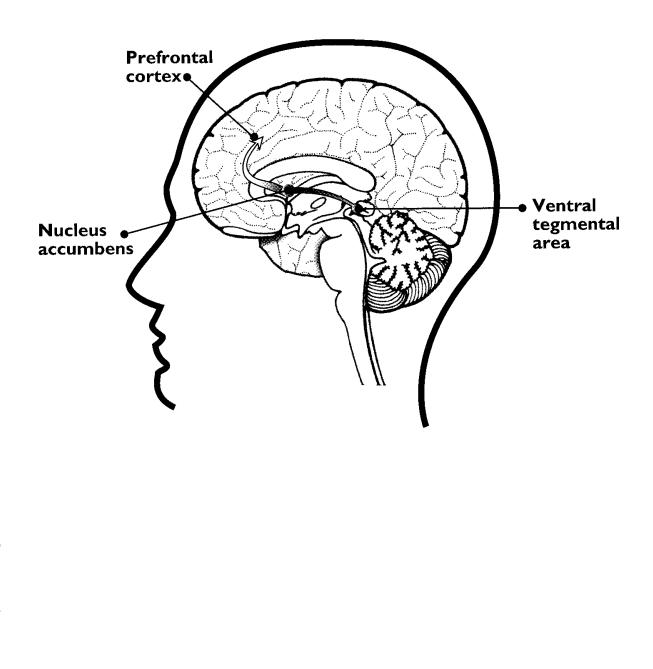
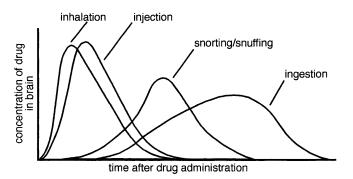
The Reward System



Use the information in the graph below to help you answer the questions.



- 1. Four drug abusers each take a drug. One person injects 100 milligrams of a drug into a vein, one person smokes 100 milligrams of the drug, one person snorts 100 milligrams of the drug, and one person swallows or ingests 100 milligrams of the drug. Who will experience the greatest effect of the drug? The individual with the greatest concentration of drug in the brain will have the greatest effect.
- 2. Who will experience the quickest effect from the drug?
- 3. Who will experience the least effect from the drug?
- 4. Who will experience the slowest effect from the drug?
- 5. Tobacco smokers can use nicotine patches to help them quit smoking. The nicotine patches help the smoker slowly lower the amount of nicotine that enters the body. How does the nicotine in the patch enter the body?
- 6. Explain why the different ways of taking drugs cause different responses.

A teenage boy is brought into the hospital emergency room after a skateboarding accident. He complains of pain in his left leg. The doctor orders an x-ray of his leg, which reveals a fracture in the tibia. Before the doctor can set the fracture and put a cast on the boy's leg, he needs to relieve the patient's pain. The doctor prescribes morphine.

Based upon what you have learned about how drugs act in the body, how should the morphine be given to the patient? Should the morphine be given as a(n):

- pill
- shot
- inhalant

Consider each alternative and explain why the doctor should choose one method over another.