Critical-Thinking Questions:

1. Explain how opioid medications work in the brain. How are they different from natural endorphins in the brain? (Prescription opioids have a similar structure to endorphins, a type of chemical in the brain that blocks pain and contributes to feelings of pleasure and relaxation. Opioid medications act on the same receptors in the brain, brain stem, spinal cord, and other parts of the nervous system as endorphins do. These medications, however, have a stronger effect than endorphins; they are capable of blocking severe pain and flooding the brain's reward center with large amounts of dopamine, which puts a person at risk for addiction. If too much is taken, these drugs can cause a person to stop breathing.

2. What are three examples of prescription opioid misuse and/or abuse? Cite evidence from the article. (Taking medication that was prescribed to anyone other than yourself; taking medication at higher doses than was prescribed; taking medication not to treat pain but to experience a "high.")

3. Why might abuse of prescription opioids lead a person to start using heroin? (Prescription opioid pain medications and heroin are both opioids and therefore have similar effects on the body. If a person becomes addicted to prescription opioids, he or she may start taking heroin to achieve the same result.)

Writing Prompts:

• Grades 6–8: What are the risks of misusing prescription opioid pain medications? Use evidence from the article to support your answer.

• Grades 9–10: Use evidence from the article to explain why prescription drug abuse is as dangerous to your health as illegal drug abuse.

Additional Sources:

• Website: teens.drugabuse.gov/drug-facts/opioids-and-pain-relievers
• Videos: headsup.scholastic.com/students/video-collection

For more resources, visit scholastic.com/headsup/opioids/tools.
Prescription Opioid Use and Abuse

If a person takes too much of a prescription opioid, it can lead to a potentially deadly overdose. In recent years, public health officials have observed that the number of deaths caused by overdoses on opioid drugs is on the rise. What is causing this alarming increase? Some scientists see a relationship between the increasing number of overdose deaths and the rising number of prescriptions given during the past decade. Complete the activity below to analyze recent trends in opioid use and abuse.

Think It Through:

1. Roughly how many more prescriptions for opioids were given out by pharmacies in the U.S. in 2013 compared with 1991?

2. Approximately how many more people died from prescription opioid overdoses in 2013 than 2001?

3. Use data from the second graph to describe how the number of prescription opioid overdose deaths has changed over time for both men and women.

4. What evidence suggests that the number of opioid prescriptions could be linked to the number of overdose deaths? Use evidence from the graphs and the article to explain your answer.

5. Many scientists are urging the medical community to improve the way prescription opioids are prescribed. That may include using other, less powerful medications more often. Do you agree with this recommendation? What factors might scientists and doctors be considering? Use evidence from the graphs and from the article to support your answer.