AFTERSCHOOL TRAINING TOOLKIT

Project- and Problem-Based Science

Life Science: What Happened to Mya?

Day 1 Scenario:
Some people saw a teenaged girl faint on the sidewalk by 42nd and E Street. One person said that before the girl fell, she was acting strangely—she seemed fearful, anxious, and beads of sweat were on her forehead. In an attempt to identify her, one woman opened her purse and saw a black kit with a meter and some strips, a needle and a bottle of something, and some wafers that said "glucose." The woman found an identification card and said the girl's name was Mya. Mya had a medical-alert bracelet around her right wrist. One of the bystanders called 911.

- What do you think happened to Mya?

- What clues can you find in the scenario?

- What questions do you have?

- What does your research reveal?

- Why do people faint?

- What is glucose, and what happens if you don't have enough?

- Summarize your findings.

What Happened to Mya?

Day 2 Scenario:
On the way to the hospital, the paramedics took Mya's glucose levels and got a reading of 47; they started an IV. Mya began to wake up. At the hospital, the doctors and nurses gave her some orange juice and monitored her overnight. The next day, her glucose levels rose to 120.

- What are the symptoms of diabetes?

- What is the difference between type I and type II diabetes? What is the cause of diabetes? What is pre-diabetes?

- What is insulin, and what happens when a person has too much or too little?

- What kinds of exercise and nutrition are helpful in controlling and preventing diabetes?

- What do diabetics do to monitor their glucose levels?

- What complications are associated with diabetes?

- What can you do to prevent diabetes?

- How can you help a person with diabetes?