

## **Article-Based Observation**

**Directions:** After reading the article "<u>Charging the future</u>," answer these questions:

1. According to materials scientist George Crabtree, how did the lithium-ion battery transform personal electronics?

2. What are current and potential future applications of batteries? Describe an environmental benefit to a future application.

3. How does a battery produce electricity? How does a battery recharge?

4. What is the best existing battery type, according to the article, and what is an advantage and disadvantage of it? 5. How do lithium-sulfur batteries work, and what are their potential applications, advantages and disadvantages? What are researchers doing to develop and improve them?

6. How do magnesium-ion batteries compare with lithium-ion batteries? What is a current drawback?

7. How do flow batteries work, and what are their potential applications, advantages and disadvantages? What are researchers doing to develop and improve them?

8. If you had 15 seconds to summarize this article to a classmate, what would you say?