



Name: _____

You Wouldn't Want to Live Without Electricity!
Student Discussion Guide

Chapters: Introduction & If the Lights Went Out:

1. Think about all the things you do every day that require electricity. Imagine you no longer have electricity. Write a summary of "An Afternoon in My Life Without Electricity." Start from when you get home from school and end when you go to bed.

2. Make a list of 10 things in your home that need electricity to work. Think about things that need to plug in, charge or use batteries to work.

3. Electricity can be dangerous! Imagine an alien from space landed in your backyard. Give the creature three tips about being safe with electricity.

Chapter: Light & Heat

4. More than 100 years ago, people did not have electricity for light. What is the connection between heat and light?

5. What are some of the things people have burned to produce light in the 16th through the mid-19th century?

Chapter: Tingles & Sparks

6. The ancient Greeks first discovered static electricity without knowing it. Thales of Miletus noticed that by rubbing a piece of amber, small feather would stick to it. Where do we experience static electricity in our everyday world?

Chapter: Thunder and Lighting

7. Benjamin Franklin developed a lightning rod that would protect buildings from lightning strikes. Even today all tall buildings have them. Using words and a picture, explain how they work.



Chapter: Putting Electricity to Work

8. Electricity can now be generated and stored. Inventors began looking for ways to use it. As they build electric machines, they discover there is a connection between electricity and _____.

Chapter: Fossil Fuel Power

9. Much of the world's electricity is made from burning natural gas and coal. At the power plant, these fossil fuels are used to boil water. This changes water's state of matter from a liquid to a _____.

10. Why is burning fossil fuels harmful to our environment? _____

Chapter: Going Green

11. Other than fossil fuels, what other energy sources can be used to generate electricity? What is one advantage all these resources have in common?

Chapter: Save the Planet

12. Page 28 lists 3 ways to save electricity. Make a list of at least 3 additional ways you can save energy every day.

13. In your opinion, what is the most valuable thing people have invented that uses electricity? Explain why.
