Date: _

Getting Ready to Read: *Blackout!*

- 1. Before reading the book *Blackout!*, read the sentences below.
- 2. If you agree with a sentence, write an "A" on the line before the sentence.
- 3. If you disagree with a sentence, write a "D" on the line before the sentence.
- 4. After you read the book, return to this page and read the sentences again. Decide whether your ideas have changed. Be ready to explain your thinking.

In a blackout, lights do not work, but other electrical devices do.

Blackouts can happen when people use a lot of electrical energy.

_____ Blackouts can last an hour or many days.

_____ Blackouts are always caused by bad weather.

____ Every blackout is caused by failure of the electrical grid.

Name: _____ Date: _____

Reading Reflection: Blackout!

- 1. Read each question below.
- 2. Use what you read in *Blackout!* to answer each question.
- 3. Use evidence from the text to support your thinking.

What are some of the causes of blackouts? How can a heat wave cause a blackout? Choose one blackout that you read about. Record the title and page number below. Then, answer the question on the next page. Article title:

Energy Conversions—Lesson 4.1 (optional)

Name: ____

_____ Date: _____

Reading Reflection: Blackout! (continued)

What would you recommend the people who live in the area of the blackout do to prevent blackouts in the future? Why?

Make a drawing if it helps you explain your thinking. Label your drawing.

_____ Date: __

Multiple Meaning Words

Some words can mean more than one thing. For each word in the chart:

- 1. Read the sentence from *Blackout!* that uses the word.
- 2. Read the two meanings the word can have.
- 3. Decide which meaning the word has in the sentence from the book and circle that meaning in the table.

Word	Sentence from the book	Meaning 1	Meaning 2
article	This book is a collection of articles about failures in the electrical system.	a piece of writing on a subject that is included in a magazine, newspaper, etc.	an individual object (such as an article of clothing)
rolling	Heat Wave Leads to Rolling Blackouts.	to move on wheels	continuing in a series of stages
plant	Coal shortages havé shut down several big power plants .	an herb or other small vegetable growth	a building or factory where something is made
power	Millions Without Power After Hurricane Sandy.	the ability to control people or things	to supply a device with electrical energy

_____ Date: ___

Parts of the System That Failed: Simple Electrical System

- 1. Write about the simple electrical system that you observed. Which part or parts of the simple electrical system failed? Circle that part or parts.
- 2. Explain your response in the space below.
- 3. Explain what caused the system to function when you made a change.



_____ Date: ____

Daily Written Reflection

Think of a system that includes these parts: the sun, a solar panel, wires, and a lamp. Describe two possible ways that you could make this system fail and explain why each failure would occur.

Make a drawing if it helps you explain your thinking. Label your drawing.

Energy Conversions—Lesson 4.2 (optional)

Date: _

Parts of the System That Failed: Blackout!

- 1. On the line below, record the title of the article you read in *Blackout!*
- 2. Based on that article, which part or parts of the system failed? Circle that part or parts in the Electrical System below.
- 3. Explain your response in the space provided below.



What evidence did you see or read about in the article that makes you think this?

Date: _

Synthesizing Ideas About System Failure

- 1. Read the question below. Talk about it with your group.
- 2. Record ideas from *Blackout!* and from other sources in the boxes below. If you use an idea from *Blackout!*, write the page number where you found that information.
- 3. Then, connect the ideas together to answer the question. Write your new understanding in the box below the arrow.

Idea:
Page:
Idea:
Page:
Idea:
Page:
Idea:
Page:
\checkmark
New understanding:

Question: How might a system fail?

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Date: ____

Reviewing Evidence

- 1. Carefully examine each piece of evidence to try to find another possible cause of the blackouts in Ergstown.
- 2. Record what you observe about each piece of evidence in the "What I observe" column.
- 3. Synthesize what you observe with what you read in *Blackout!* in order to think about what the evidence means for Ergstown. Write your ideas about this in the third column.

Source of evidence	What I observe	Why might this evidence be important?
Ergstown Weather Report		
Ergstown Blackout Map		
Ergstown Regional Map		