Teaching

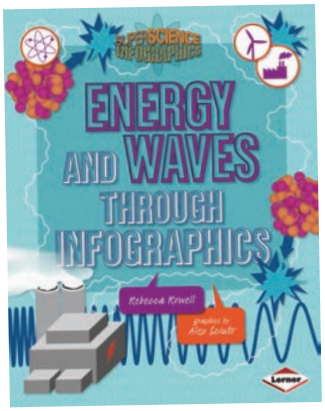
Super Science Infographics

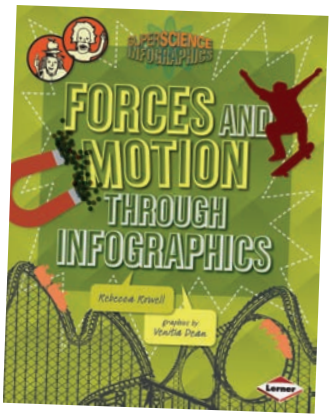
Interest Level: Grades 3–5
Reading Level: Grade 4

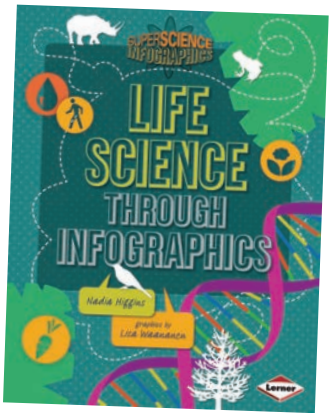
LERNER SOURCE™

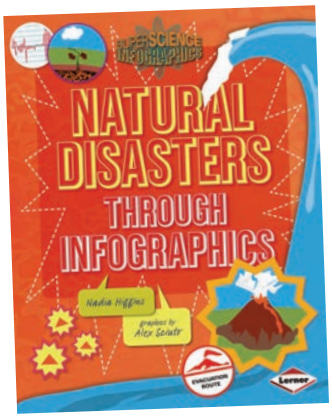
Titles in this series:

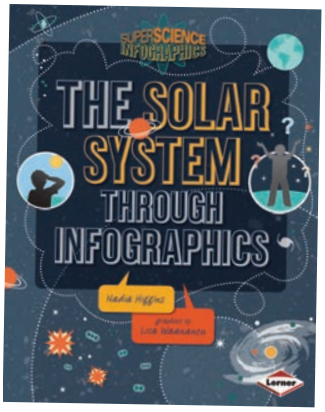
Energy and Waves through Infographics
Forces and Motion through Infographics
Life Science through Infographics
Natural Disasters through Infographics
The Solar System through Infographics
Weather and Climate through Infographics

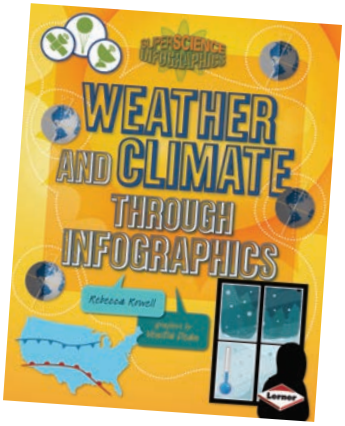












Standards

Next Generation Science Standards

- Asking Questions and Defining Problems (Scientific and Engineering Practices)
- Planning and Carrying Out Investigations (Scientific and Engineering Practices)
- Analyzing and Interpreting Data (Scientific and Engineering Practices)
- Obtaining, Evaluating, and Communicating Information

Common Core Reading (Informational Text)

- Key Ideas and Details
- Craft and Structure
- Integration of Knowledge and Ideas
- Range of Reading and Level of Text Complexity

Common Core Writing

- Research to Build and Present Knowledge

Multiple Intelligences Utilized

- Verbal-linguistic, bodily-kinesthetic, visual-spatial, logical-mathematical, interpersonal, intrapersonal, naturalist

Lerner DIGITAL™

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Lesson 1
What Is an Infographic?

Purpose
Students will understand the purpose and characteristics of infographics.

Materials
- Super Science Infographics series
- Look at Infographics p. 6
- pencils

Prepare
- Prepare to show the infographic in Look at Infographics p. 6 electronically.
- Copy Look at Infographics p. 6 for each student. Alternatively, you might ask students to copy the questions into their notebooks when you show the diagram electronically.
- Choose a book from the Super Science Infographics series to use as an example. Each student or small group should have a copy of the book.

Pretest
- What are graphics? What are diagrams? What are infographics?

Discuss
- Invite students to look through the Super Science Infographics book. Point out that every image in the book is an infographic.
- Ask students to name some characteristics of infographics. Help students see that infographics contain facts or data, art, and some insight into the data.
- Ask students to name some examples of kinds of infographics. Help students come up with a list, including graphs, charts, timelines, flowcharts, maps, and diagrams. Point out that not every graphic is necessarily an infographic.

Model
- Show Look at Infographics p. 6 electronically. This diagram comes from *Forces and Motion through Infographics*.
- Point out the major features of the infographic, such as the title, labels, pie chart, captions, and artwork.
- Ask students to explain the purpose of this infographic. Then ask them how the artwork is connected to the purpose.

Read
- Read the rest of the Super Science Infographics book.

Practice
- Invite students to find different infographics in the book.
- Students will record where they found each infographic and then answer the questions in Look at Infographics p. 6.

Discuss
- Why do you think people use infographics to share information?

Evaluate
- Evaluate Look at Infographics p. 6 for completeness and accuracy.

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Lesson 2
Finding Infographics

Purpose
Students will find and understand infographics in the news media.

Materials
- Super Science Infographics series
- access to online news sources, such as the *New York Times* or *USA Today*, or print copies of these news sources
- pencils

Prepare
- Find and print copies of a current infographic from a news source, such as the *New York Times* or *USA Today*. Alternatively, plan to show the infographic on the board.
- Arrange for students to have online access, or gather print newspapers or magazines that contain infographics.

Pretest
- What are infographics? Where can you find infographics outside of school?

Read
- Read books from the Super Science Infographics series.

Model
- Ask students to recall the list of infographics they made in Lesson 1. Refer to that list as needed for this lesson.
- Show the prepared infographic to the class.
- Ask students what the infographic is showing. Invite them to point out various elements, including captions, artwork, and type of graphic.

Practice
- In small groups, students will look through online or print sources to find examples of infographics.
- Each group should collect at least two examples of infographics.
- Each group should write answers to the following questions and directives about their infographics:
  What is the title of the infographic?
  What kind of graphic is used?
  Describe the artwork in this infographic.
  In your own words, what is the infographic telling you?

Discuss
- What kinds of information do infographics show?
- What kinds of infographics are most interesting to you? Why?

Evaluate
- Collect answers to the infographics questions and evaluate for understanding.

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Lesson 3 Analyze Elements of Infographics

Purpose
Students will analyze the infographics they researched in Lesson 2.

Materials
- Super Science Infographics series
- Analyze Infographics p. 7
- infographics found in Lesson 2
- pencils

Prepare
- Complete Lesson 2 in this teaching guide.
- Copy Analyze Infographics p. 7 for students. Alternatively, prepare to show it electronically and ask students to copy the questions into their notebooks.

Pretest
- Why do people use infographics?
- Why do people create and look at art?

Read
- Read books from the Super Science Infographics series.

Model
- Explain that students will be looking at the infographics from Lesson 2 in more detail. They may also analyze infographics from the Super Science Infographics books, if time allows.
- Review the questions in Analyze Infographics p. 7 with students. Answer any questions about the assignment.

Practice
- Students will look at the infographics they found in Lesson 2 and answer the questions in Analyze Infographics p. 7.
- If time allows, students may also choose infographics from the Super Science Infographics books and answer the questions about those as well.

Discuss
- What kinds of infographics do you like best?
- What parts of the infographics make them most helpful?
- Are there parts of some infographics that are not useful?

Evaluate
- Evaluate completed Analyze Infographics p. 7 for completion and comprehension.

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Lesson 4
Make an Infographic

Purpose
Students will collect data and create their own infographics.

Materials
- Super Science Infographics series
- Infographic Guidelines p. 8
- paper
- pencils
- art supplies such as crayons, colored pencils, and markers or access to online infographic-building websites. Some free sites for making infographics online include http://visual.ly/, http://infogr.am/, and http://www.easel.ly/.

Prepare
- Divide students into groups of three or four.
- Copy Infographic Guidelines p. 8 for each group.

Pretest
- What kinds of data are you interested in?
- How do we gather data?

Read
- Read books from the Super Science Infographics series.

Model
- As a class, brainstorm a list of data students could collect by polling their classmates. Ideas include students' heights, favorite colors, weekend activities, hair color, ways they get to school, kinds of pets, or number of kids in their families.
- Explain that students will work in groups to poll their classmates. Then they will create infographics to show their data. They will use Infographic Guidelines p. 8 to guide them in their task.

Practice
- Students will work through the questions in Infographic Guidelines p. 8 to complete this assignment.

Discuss
- What did you like about this assignment? What was difficult?

Evaluate
- Evaluate students' completed infographics for effort and participation.

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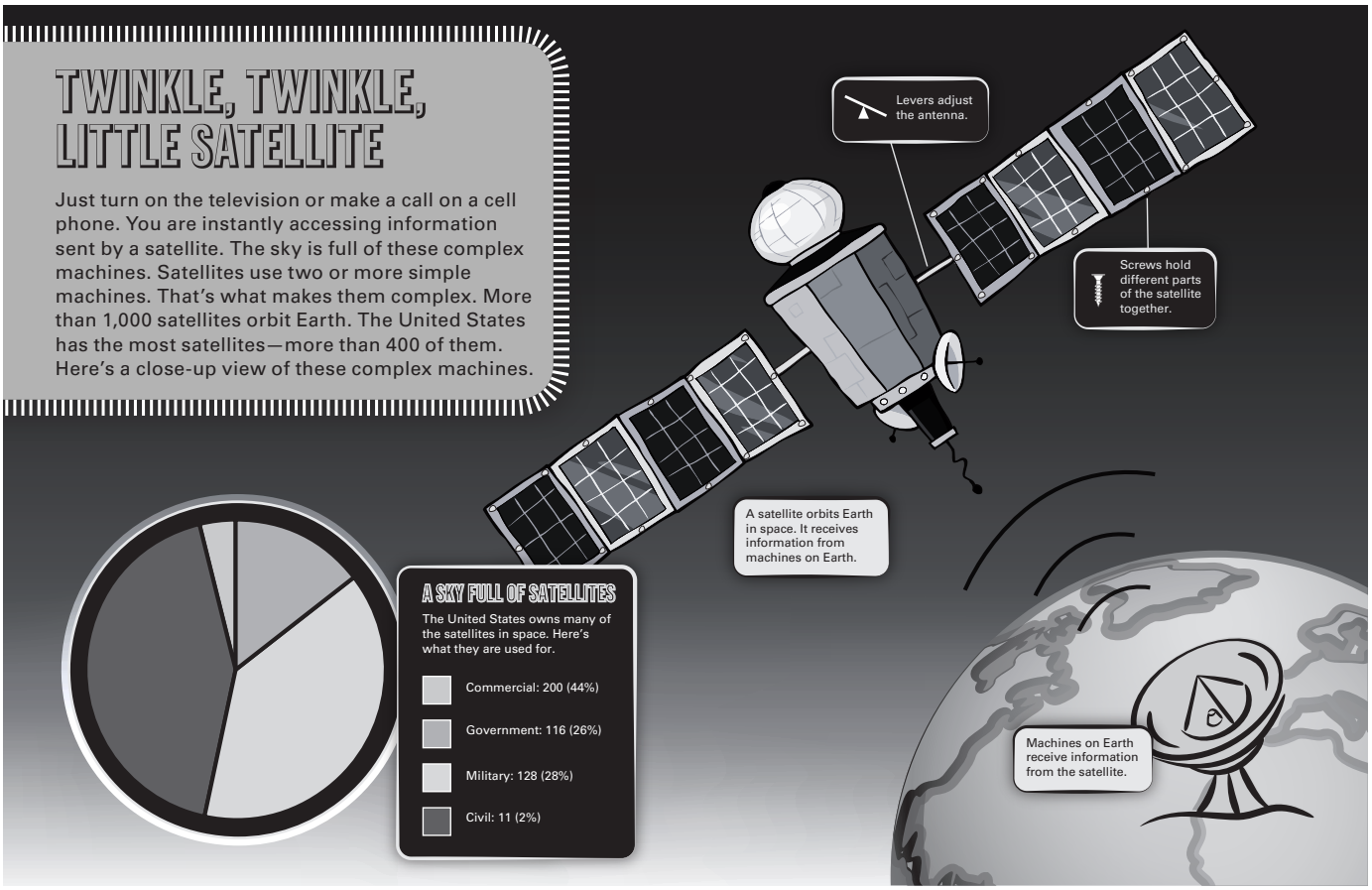
Name _____ Date _____

Look at Infographics

Directions: Use the diagram to answer the questions below.



1. What is the **title** of this infographic? _____

2. What does the pie chart show in this infographic? _____

3. Describe the artwork in this infographic. _____

_____

4. What is the **purpose** of this infographic? _____

_____

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Name _____

Analyze Infographics

1. What is the title of this infographic? _____

2. Where did you find this infographic? _____

3. Describe in words what this infographic is telling you. _____

4. Describe the art used in this diagram, including colors and pictures. _____

5. Describe any other visual elements in this infographic, such as text size or diagrams. _____

6. Why do you think the artist used this art to show this information? _____

7. If you were showing this information, would you do anything differently? _____

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Name _____

Infographic Guidelines

1. Choose some data to collect. What do you want to know?

2. Poll your classmates. Write down their answers. This information is your data.

3. How will you show your data? Think about the topic of your data. How can you show that visually? Will you use a chart, a graph, a timeline, a map, a diagram, or something else? What kind of artwork will help get your message across?

4. Create your infographic, either on paper or online.

5. Review your work. Is all the information represented? Does it make sense? Will someone else understand your data?

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