Alternative Energy Resources Guided Practice

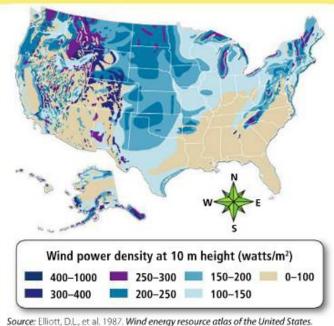
Read and answer the questions for "Map it: Wind Patterns" on page 568 in your textbook. Work with your tablemates to answer the questions.



Wind Patterns

The map shows how wind conditions compare in different parts of the United States. Use the map to answer the following questions.

- 1. Interpret Maps In general, which part of the United States—the eastern part or the western part—has winds with the highest density?
- 2. Interpret Maps Find your state on the map. Do you think your state could obtain a lot of its energy from wind? Explain your answer.
- 3. Infer Do you think the southeastern part of the United States has many wind farms? Explain your answer.
- 4. Infer On the basis of the circle graph in Figure 19, what can you infer about the state of the wind-energy industry in the United States?



Golden, CO: Solar Energy Research Institute.

Alternative Energy Resources Independent Practice

- 1. How does the Three Gorges Dam demonstrate that renewable energy resources have both benefits and costs?
- 2. What is the main difference between passive and active solar heating? List four benefits of solar power.
- 3. You have been asked to evaluate the possibility of constructing a wind farm on a ridge top among a city's suburbs. What information would you need to know before deciding whether or not to recommend the site?
- 4. Hydrogen fuel can cause huge explosions and enormous damage when ignited. You are on a commission to evaluate the safety of hydrogen fuel. What safety measures would you recommend? Consider the design of transport vehicles, routes they take, and time of day transportation occurs.

