

APES Reading Guide 12.1

Directions: Use pages 316-322 in Chapter 12 of our APES textbook (or crjust.us/pp316322) to complete the questions. Write your responses in complete sentences in your notebook. Clearly label your notebook with the name of this reading guide.

Nonrenewable energy accounts for most of our energy use (pages 316-322)

1. Summarize the section of the reading “Worldwide Patterns of Energy Use” on pages 316-318. What’s the gist?
2. Name four types of nonrenewable energy from figure 12.1.
3. What are the patterns of energy use in the United States?
4. Describe the difference between energy efficiency and energy quality.
5. Read through the “Do the Math” insert in the blue box on page 321. Try to work your way through the example. Do the “Your Turn” problem in your notebook.

APES Reading Guide 12.2

Directions: Use pages 322-325 in Chapter 12 of our APES textbook (or crjust.us/pp322325) to complete the questions. Write your responses in complete sentences in your notebook or on your notes packet.

1. What is the basic process by which the energy in a fuel is converted into electricity?
2. What are the major fuels that are used to generate electricity in the US?
3. This section of the chapter uses the term “thermal power plant.” Look into it... What is a thermal power plant?
4. Mini-FRQ: Explain TWO methods of improving the efficiency of a thermal power plant.

APES Reading Guide 12.3

Directions: Use pages 325-330 in Chapter 12 of our APES textbook (or crjust.us/pp325330) to complete the questions. Write your responses in complete sentences in your notebook or on your notes packet.

1. Summarize the advantages and disadvantages of using coal as a primary energy source.
2. What’s the problem with toxic ash?
3. Read the “Extra Practice #1 - Extracting Coal from the Lithosphere” section of your notes packet. Explain why a coal extraction business would use one coal mining method over the other. Give an advantage and disadvantage to both methods.