

Chapter 17

REVIEW QUESTIONS

p 349

1 - Explain why a tire swing is a good example of conservation and conversion of energy.

p 350

2 - Explain why the stalled car restarting can be an example of the second law of thermodynamics.

p 350 -352

3 - Give examples of first and second law efficiencies. What is the difference between these two types of efficiencies?

4 - What is "the grid?"

p352-353

5 - The US has \_\_\_\_\_ percent of the world's population and uses \_\_\_\_\_ percent of the world's energy.

6 - What percent of US energy is from fossil fuels?

7 - What are some examples of alternative energy sources?

7a. What is "cogeneration?"

p 355

8 - What are some ways the book suggests for creating more efficient building designs?

p 355

9 - Contrast how building efficiency might be improved in new vs. old buildings.

10 - What is the main reason that industries have been able to have higher productivity with less energy use?

11 - Describe how cars have changed in recent years in terms of energy efficiency.

11a - What are the key provisions of the energy policy act of 2005?

Pg 357

12 - According to the book, why is the "hard path" more comfortable?

13 - According to the book some people defend the hard path by saying it would decrease environmental destruction.

How would this be so?

14 - What are the characteristics of the "soft path" according to Amory Lovins?

p 358

15 - Describe some ways that energy use can differ from region to region.

16 - Contrast the two possible scenarios for energy usage in the year 2030.

p 356-357

17 - How might taxation be used to help conserve energy usage?

p 359

18 - What characteristics would sustainable energy have?

19 - Describe some ways that a sustainable energy plan might be constructed.