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Energy Quiz

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ENERGY QUIZ

America, with about 6% of the world's population, consumes about 30% of the world's available energy. The average American citizen consumes about seven times the energy of other world citizens. But what does the average citizen know about this energy that is used in a too casual manner?

The National Center for Education Statistics surveyed the energy awareness and attitudes of a sampling of America's young (26-35) adults and found that:

- 1. Half of America's young adults mistakenly believe that improved technology will eventually make it possible to convert to useful work all of the energy released by burning a fuel.
- 2. Less than half (49%) of the young adults know that coal is the largest fossil fuel reserve in the United States.
- Only 14% of the young adults know that coal is the primary energy source used to produce the largest portion of the nation's electrical energy.
- 4. Only 16% of the young adults know that coal, as well as petroleum, can be converted to gasoline.
- 5. Less than half (49%) of the America's young adults know that petroleum (crude oil) provides the largest percentage of energy consumed in the United States.
- 6. Half of the young adults know that the U.S. is likely to run out of petroleum before it runs out of coal.

Now test your energy knowledge with sample questions from the survey.

- 1. What is the largest potential source of energy?
- 2. How is electricity consumption measured?
- 3. What is the expression used in rating the heating value per pound of coal?
- 4. From the following list, what one item does not use fossil fuel as a raw material?
 - a. plastic
 - b. nylon
 - c. asphalt

d. glass

e. ammonia fertilizer

- 5. How much time is required from start-up to production in underground coal mines?
- 6. How much time is required from start-up to production in oil refineries?
- 7. How many years are required from start-up to production for a nuclear-power plant?
- 8. A 40-watt fluorescent light tube will:
 - a. Use more electricity than a 40-watt incandescent light bulb
 - b. Produce more light than a 40-watt light bulb for the same amount of energy
 - c. Produce the same amount of light
- 9. What is the primary energy source used to produce the largest portion of U.S. electrical energy?

a. coal

d. solar

b. petroleum

e. hydroelectric

- c. nuclear
- 10. Most electricity is produced in power plants owned by:

a. the federal government

d. utility corporations

b. cities or towns

e. other

c. major oil companies

Answers

- 1. Solar energy
- 2. Kilowatt hours
- 3. Btu or calorie
- 4. Glass
- 5. Five years
- 6. Five years
- 7. Ten years
- 8. Produce more light than a 40-watt incandescent bulb for the same amount of energy
- 9. Coal
- 10. Utility corporations

The Energy Consumer, 1979, Vol 1(1):20-21.