

17.1 PBL

1. How does a sunny day 200 million years ago relate to your life today?

a.

2. List the five main purposes for which we use fuel.

a.

3. List the 5 factors that determine a fuel's suitability.

a.

4. Explain why coal would not make a suitable fuel for powering an airplane.

a.

5. "The law of conservation of energy tells us that we can't get something for nothing, but we refuse to believe it." –Isaac Asimov. Explain how this quote relates to energy resources.

6. Explain why electricity is convenient.

a.

7. What are 2 disadvantages of electricity use?

a.

8. How is electricity generated (in other words, how does an electric generator work)?

a.

9. Look at figure 4 on page 469. Which country had the highest energy consumption per person? Why?

a.

10. Describe how coal is formed.

a.

11. When did the coal deposits within the U.S. form?

a. between 100 million and 40 million years ago.

12. How are oil and natural gas formed?

a.

13. What type of fossil fuel makes up most of the world's reserves?

a.

14. What is the advantage to underground mining with respect to the environment?

a.

15. Why does the grade of coal matter?

a.

16. What are two disadvantages to burning high-sulfur, low grade coal?

a.

17. What percentage of electricity in the U.S. comes from burning coal?

a.

18. Name 3 petroleum products.

a.

19. Where can oil be found on Earth?

a.

20. In what region can most of the oil reserves be found?

a.

21. List 3 environmental effects of using oil.

a.

22. What percentage of the world's nonrenewable energy comes from natural gas?

a.

23. Why is burning natural gas considered better than burning other fossil fuels?

a.

24. What are the 2 main reasons why the world energy demand is expected to double by the year 2050?

a.

25. What is the guiding principle behind the predictions of future oil production?

a.

25. Why is oil in deep ocean reserves inaccessible?

a.

17.1 PBL

1. How does a sunny day 200 million years ago relate to your life today?
2. List the five main purposes for which we use fuel.
3. List the 5 factors that determine a fuel's suitability.
4. Explain why coal would not make a suitable fuel for powering an airplane.
5. "The law of conservation of energy tells us that we can't get something for nothing, but we refuse to believe it." –Isaac Asimov

Explain how this quote relates to energy resources.

6. Explain why electricity is convenient.
7. What are 2 disadvantages of electricity use?
8. How is electricity generated (in other words, how does an electric generator work)?
9. Look at figure 4 on page 469. Which country had the highest energy consumption per person? Why?
10. Describe how coal is formed.
11. When did the coal deposits within the U.S. form?
12. How are oil and natural gas formed?

13. What type of fossil fuel makes up most of the world's reserves?
14. What is the advantage to underground mining with respect to the environment?
15. Why does the grade of coal matter?

16. What are two disadvantages to burning high-sulfur, low grade coal?

17. What percentage of electricity in the U.S. comes from burning coal?
18. Name 3 petroleum products.

19. Where can oil be found on Earth?
14. In what region can most of the oil reserves be found?
15. List 3 environmental effects of using oil.

16. What percentage of the world's nonrenewable energy comes from natural gas?
17. Why is burning natural gas considered better than burning other fossil fuels?

18. What are the 2 main reasons why the world energy demand is expected to double by the year 2050?

19. What is the guiding principle behind the predictions of future oil production?

20. Why is oil in deep ocean reserves inaccessible?