

# Directed Reading A

---

## Section: Fossil Fuels

### ENERGY RESOURCES

- \_\_\_\_\_ 1. Natural resources that humans use to generate energy are called
- a. fossil fuels.
  - b. petroleum.
  - c. energy resources.
  - d. hydrocarbons.
- \_\_\_\_\_ 2. A nonrenewable energy resource formed from the remains of plants and animals that lived long ago is a
- a. fossil fuel.
  - b. hydrogen fuel.
  - c. bio fuel.
  - d. clean fuel.
3. Give three examples of fossil fuels.

---

---

---

4. Why is it important to conserve fossil fuels?

---

---

---

---

### TYPES OF FOSSIL FUELS

- \_\_\_\_\_ 5. All living things are made up of the element
- a. hydrogen.
  - b. carbon.
  - c. calcium.
  - d. iron.
- \_\_\_\_\_ 6. Most carbon in fossil fuels exists as hydrogen-carbon compounds called
- a. carbohydrates.
  - b. hydrocarbons.
  - c. petroleum distillates.
  - d. black gold.
- \_\_\_\_\_ 7. A liquid mixture of complex hydrocarbon compounds is
- a. natural gas.
  - b. coal.
  - c. petroleum.
  - d. hydrogen.



**Directed Reading A *continued***

17. Describe how microscopic sea organisms form petroleum and natural gas.

---

---

---

---

---

18. What are permeable rocks?

---

---

19. What will happen to part of the remains of today's sea life millions of years from now?

---

---

---

**Match the correct description with the correct term. Write the answer in the space provided.**

- |   |                    |
|---|--------------------|
| _____ 20. brown, crumbly matter made of plant material, burned for heat or used as fuel                       | a. bituminous coal |
| _____ 21. pressure and heat applied to peat force out water and gases, creating coal that is about 70% carbon | b. peat            |
| _____ 22. sediment and pressure force water and gases out of lignite, creating coal that is about 80% carbon  | c. lignite         |
| _____ 23. the hardest type of coal, about 90% carbon  | d. anthracite      |

24. What type of coal burns most cleanly?

---

---

**Directed Reading A *continued***

---

**WHERE ARE FOSSIL FUELS FOUND?**

- \_\_\_\_\_ 25. Approximately what fraction of the petroleum used by the United States is imported from other countries?
- a. one-fourth
  - b. one-half
  - c. three-fourths
  - d. all

**HOW DO WE OBTAIN FOSSIL FUELS?**

- \_\_\_\_\_ 26. How are petroleum and natural gas removed from Earth's crust?
- a. by drilling wells
  - b. by deep mining
  - c. by strip mining
  - d. by surface mining
27. Give two names for the process by which soil and rock are stripped from Earth's surface to expose underlying coal.

---

---

**PROBLEMS WITH FOSSIL FUELS**

28. Rain, sleet, or snow that has a high concentration of acids, often because of air pollutants, is called \_\_\_\_\_.
29. What is one major environmental problem caused by coal mining?

---

---

---

30. What are two types of problems caused by producing, transporting, and using petroleum?

---

---

---

31. The photochemical haze that forms when sunlight acts on industrial pollutants and burning fuels is called \_\_\_\_\_

32. What are two reasons some large cities have serious smog problems?

---

---

---