

Energy Kids Page WebQuest

You must follow the instructions step by step. Do not jump ahead. You will be using the website below to answer questions about energy resources.

- **Open up the internet and go to the site:** <http://www.eia.doe.gov/kids/energyfacts/index.html>

1.) List the forms of nonrenewable energy.

- **Now, click on the word “Oil (Petroleum)”**

Teacher Initials: _____

2.) How is oil formed?

3.) What does the word “petroleum” mean?

4.) Describe crude oil and where it is found.

5.) What are the five top crude-oil producing countries?

6.) What percentage of oil is brought in from outside countries to supply United States demand for oil?

7.) List 6 products that crude oil is used to produce that is used in everyday life in the U.S.

8.) What is the leading cause of sources of petroleum in North American Waters?

- **Click on the Back button.**

- **Now, click on the word “Natural Gas.”**

Teacher Initials: _____

9.) How is natural gas formed?

10.) Describe the physical properties of natural gas.

11.) List 6 uses of natural gas in the everyday lives of people in the U.S.

12.) Compared to other energy resources, is natural gas considered to be positive or negative for the environment?

- **Click on the Back Button.**

- **Now, click on the word "Coal."**

Teacher Initials: _____

13.) Describe the physical properties of coal.

14.) How does coal form?

15.) What are the two methods of mining used to get coal out of the ground?

16.) Write one sentence summarizing the paragraph, "Transporting Coal."

17.) What country has the largest known coal reserves in the world?

18.) How many states is coal mined in?

19.) List 6 uses of coal in the everyday world.

20.) Name one negative effect of mining coal on the environment.

- **Click on the Back button.**

- **Now, click on the word "Nuclear."**

Teacher Initials: _____

21.) What is nuclear energy?

22.) What percentage of nuclear electricity is generated in the U.S.?

23.) How many nuclear power plants are in the U.S. today?

24.) Nuclear power plants generate?

- **Click on the Back Button.**

25.) What are the 6 forms of renewable energy resources?

- **Click on the word “Solar.”**

Teacher Initials: _____

26.) What is solar energy?

27.) Solar energy is converted into what energy?

28.) Give two examples of how solar energy is used.

29.) What do solar cells do?

30.) What do solar power plants do?

31.) What are the 2 main disadvantages to solar energy?

32.) Explain how solar energy is beneficial for the environment.

- **Click on the Back Button.**

- **Click on the word “wind.”**

Teacher Initials: _____

33.) What is wind and how is it caused?

34.) What did American colonists use windmills for?

35.) What do wind machines produce?

36.) Describe a wind power plant.

37.) Describe the negative effects of wind machines.

- **Click the Back Button.**

- **Click on the word “Geothermal.”**

Teacher Initials: _____

38.) What does the word “geothermal” mean?

39.) What is geothermal energy?

40.) Geothermal energy is generated in the

41.) Where is geothermal energy found?

42.) Name 2 ways people have used direct geothermal energy?

43.) Describe how has Iceland used geothermal energy?

- **Click on the Back Button.**

- **Click on the word “Biomass.”**

Teacher Initials: _____

44.) What does Biomass mean and what does it contain?

45.) Name 5 things that are biomass materials.

46.) What is the most common biomass material?

47.) 84% of wood energy is used where?

48.) How can biomass energy be negative to the environment?

- Click on the Back Button.
- Click on the word "Hydro."

Teacher Initials: _____

49.) Hydroelectric power generates what type of energy?

50.) What 3 states hold over one-half of the total U.S. hydroelectric capacity for electricity is

51.) Most dams in the United States were not built to provide electricity, but for what two things?

- Click on the Back Button.
- Click on the word "Ocean."

Teacher Initials: _____

52.) Tides are the rising and falling of the ocean shore. What are tides caused by?

53.) Compare wind turbines and wave turbines.

54.) Not only could the ocean provide us with tidal energy, but _____ energy.

55.) What is Ocean Thermal Energy Conversion?

56.) Since the ocean expands almost two-thirds of the Earth, it makes sense to use that open ocean to provide us with energy. What are the two forms of energy have scientists considered placing over the open ocean?