**NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**ENERGY: CONSERVATION AND TRNASFER
STUDY GUIDE**

**1. How has burning fossil fuels most caused a decline to the quality of air that people breathe?**

|  |  |
| --- | --- |
| A | by adding particle pollution |
| B | by creating a hole in the ozone layer |
| C | by causing acid precipitation to fall |
| D | by increasing the levels of carbon dioxide |

**2. Which of these statements about nonrenewable resources is true?**
A They are inexpensive.
B They help keep the air clean.
C They can take millions of years to form.
D They are used because they are easily removed from the ground.

**3. Why is renewable energy a better alternative to nonrenewable energy?**A Renewable energy is less expensive than nonrenewable energy.

B Renewable energy is readily available, while nonrenewable energy supplies are limited.
C Renewable energy requires much less equipment maintenance than nonrenewable energy.
D Renewable energy harms the environment, while nonrenewable energy is environmentally friendly.

**4. Which would most likely occur if coal supplies were depleted?**

A increased air pollution
B decreased air pollution
C increased water pollution
D decreased water pollution

**5. Which factor is most likely to cause the reduction of water resources that could be used for energy production?**A increased pollution
B increased deforestation
C increased human population
D increased global temperatures

**6.**  **Which would *most* adversely affect hydroelectric power?**

A frost
B drought
C shortage of uranium

**7. Which best explains what scientists are referring to when they use the term conservation?**

A nonliving parts of the environment
B living organisms in the environment
C health of the living organisms in the environment
D protection, management, and renewal of resources

**8. Coal is used for generating about 53% of the electrical energy in the United States. Which of these environmental issues is directly contributed to by the burning of coal?**A beach erosion
B ozone depletion
C overfishing
D air pollution

**9. The use of which energy source causes the most damage to the environment?**

A fossil fuels
B biomass
C wind

**10. Which is the most likely reason wind energy is not widely used as a replacement for fossil fuels?**A Energy from wind is too expensive to produce**.**B Wind energy is an indirect form of solar energy.
C Producing energy from wind causes too much pollution.
D Few places are windy enough to produce sufficient energy

**11. Which describes how energy is distributed after being generated?**

A It dissolves into the air.
B It is release as heat.
C It seeps into the soil.

**12. Which energy resource creates the least amount of pollution when used to generate electricity?**

A oil
B coal
C wind
D natural gas

**13. Which energy source causes both air and water pollution?**

A fossil fuel
B nuclear
C solar
D wind

**14. Which will most likely occur if a limited energy resource is used without conservation efforts?**

A The cost of the resource will increase.
B The cost of the resource will decrease.
C The supply of the resource will increase.
D The cost and the supply of the resource will decrease.

**15. Which statement identifies an energy source as renewable?**A Oil, because it is found underground.
B Wind, because it is always available.
C Water, because it is becoming scarce.
D Coal, because it was formed from plants.

**16. Which form of energy production would most likely affect migration of spawning salmon?**A coal
B wind
C nuclear
D hydropower

**17. Which energy source needs to be conserved most carefully?**

A oil
B wind
C water

**18. Which source of electricity would harm the environment the least?**

A solar power
B diesel generator
C hydroelectric dams
D power lines

**19. Which best describes a problem associated with burning fossil fuels?**

A Fossil fuels produce air pollution.
B Fossil fuels renew oxygen levels in the air.
C Fossil fuels produce more fossil fuels as they burn.

**20. Which is a nonrenewable ocean resource?**

A oil
B salt
C fish
D water

**21. Which long-term effect would the depletion of fossil fuels most likely have on the environment?**

A increased air quality
B decreased water quality
C increased global temperatures
D decreased plant and animal

**22. Which energy source is renewable?**

A oil
B coal
C wind

**23. Which is a disadvantage of relying on solar energy?**

**A** Solar energy is only available after the sun sets.
B Solar energy creates a large amount of air pollution.
C Solar energy can only be captured during daylight hours.
D Solar energy is weak and does not provide adequate energy.

**24. Which is most accurate in regards to energy resources ?**

AFossil fuels are limited, therefore it is important to conserve energy.
B Solar radiation is limited, therefore it is important to conserve energy.
C Wind, water, and solar power generate pollution, therefore it is important to conserve energy.

**25. Which energy resource is non-renewable?**

A oil
B solar
C water
D wind

**26. Which best explains why fossil fuels should be conserved?**

**A** They are inexpensive.
B They are in limited supply.
C They are dangerous to handle.
D They do not cause pollution when used.

**27. Which resource would have the *most* negative impact on the transportation industry if it were depleted?**
A oil
B coal
C wood
D natural gas

**28. The increasing use of internal combustion engines could eventually deplete which resource?**

A wind energy
B petroleum
C uranium
D solar energy

**29. Which practice should be used with nonrenewable energy resources until affordable alternate energy options are developed?**

A depletion
B stockpiling
C preservation
D conservation

**30. Which energy source would be *most* affected by the depletion of water from rivers and streams?**

A fossil fuels
B wind power
C hydroelectric
D nuclear power

**31. Which renewable resource is used with photovoltaic cells to produce electricity?**

A hydrothermal energy
B solar energy
C geothermal energy
D nuclear energy

**32. A family builds an environmentally-friendly home. They want to use an energy source that is the*least* dangerous to the environment. Which source of energy should they use to heat their home?**

A geothermal
B natural gas
C nuclear power

**33. Which renewable energy source would *most likely*cause loss of habitat?**

A hydroelectric
B geothermal
C nuclear
D solar

**34. Which best explains why energy transfer is not 100% efficient?**

A Some energy cannot be transferred.
B Some energy is lost to the environment.
C Some energy is destroyed during the transfer.

**35. Which form of power is the *most* energy efficient?**

A water turbines

B coal-fired plants
C combustion engines

1. A 8.P.2.1
2. C 8.P.2.2
3. B 8.P.2.2
4. B 8.P.2.2
5. C 8.P.2.2
6. B 8.P.2.2
7. D 8.P.2.2
8. D 8.P.2.2
9. A 8.P.2.1
10. D 8.P.2.2
11. B 8.P.2.1
12. C 8.P.2.1
13. A 8.P.2.1
14. A 8.P.2.2
15. B 8.P.2.2
16. D 8.P.2.1
17. A 8.P.2.2
18. A 8.P.2.2
19. A 8.P.2.2
20. A 8.P.2.2
21. A 8.P.2.2
22. C 8.P.2.2
23. C 8.P.2.2
24. A 8.P.2.2
25. A 8.P.2.2
26. B 8.P.2.2
27. A 8.P.2.2
28. B 8.P.2.2
29. D 8.P.2.2
30. C 8.P.2.2
31. B 8.P.2.1
32. A 8.P.2.1
33. A 8.P.2.1
34. B 8.P.2.1
35. A 8.P.2.1