

CLOZE EVALUATION QUESTIONS

POWER UP: ENERGY IN OUR ENVIRONMENT

NAME _____

DIRECTIONS: Select the correct word from the four choices given. Circle the correct letter.

1. We use electricity at home, in school and in the work place. The force called ____ is a force that makes this possible. Electricity is just one type and it powers our computers, TV, games and all of our kitchen appliances. In order to produce it, we need fuel to run the necessary machines.
 1. A. power
 - B. energy
 - C. motion
 - D. gravity

2. The fuel needed to run machines that produce electrical energy comes from coal in most cases. This fuel and others from factories, cars and trucks can produce ____ or a thick poisonous blanket of air. This polluted air can be found over such cities as Los Angeles and Mexico City.
 2. A. smog
 - B. smoke
 - C. black clouds
 - D. dust clouds

3. Fuels used to produce various forms of energy are taken from the earth. Such fuels, known as ____, are coal, oil and natural gas. These sources of energy, when burned, can be harmful to our environment in many ways.
 3. A. natural fuels
 - B. energy producers
 - C. fossil fuels
 - D. energy sources

4. One of the harmful effects of burning fossil fuels is an increase in gases in the atmosphere. An increase in the gas, carbon dioxide, traps sunlight and causes the This process over a long period of time may cause the earth to warm up.
 4. A. greenhouse effect
 - B. sunlight blockage
 - C. cold air effect
 - D. hot air effect

5. The warming of the earth may lead to new problems in our environment. This process of started with factories and their burning of fossil fuels for over 150 years. The emissions of trucks and cars also adds more air pollutants and contributes to this process.
 5. A. solar heating
 - B. atmospheric heat
 - C. global warming
 - D. earth warming

6. The burning of fossil fuels adds another pollutant to the blanket of air around the earth. In areas of large industrial smoke emissions, a type of rain called ____ falls and is very harmful to plant and animal life. In lakes in northern New York State, the marine life has vanished.
 6. A. crystal rain
 - B. smokey rain
 - C. poison rain
 - D. acid rain

7. Due to the pollution of our atmosphere, we must work to reduce the use of fossil fuels. One alternate energy source is _____. This source is very clean-burning and adds no poisonous gases to the atmosphere. However, the waste that remains from the burning process must be safely disposed of due to its radioactivity.
 7. A. nuclear energy
 - B. solar energy
 - C. water energy
 - D. wind energy

8. There are natural sources for producing energy. The sun can provide _____ which when stored in batteries can run cars and electrical devices. This source of energy is always available and does not pollute our air at all.
 8. A. nuclear energy
 - B. solar energy
 - C. hydroelectric energy
 - D. wind energy

9. There are other natural forces that can be used as energy sources. One way in which electricity can be produced is through moving water or _____. This energy source can be used only where there are fast-moving rivers. This source does not pollute the environment as fossil fuels do.
 9. A. wind energy
 - B. hydroelectric energy
 - C. nuclear energy
 - D. solar energy

10. There are some energy sources that can be used only in certain areas. Electricity can be produced by _____, usable where there are constantly moving currents of air. Again, natural energy sources can reduce the amount of pollution in our environment to a great degree.
 10. A. hydroelectric energy
 - B. solar energy
 - C. nuclear energy
 - D. wind energy

Physics: A World in Motion: Fission and Fusion

Questions

1. The fission 1 g of uranium-235 releases over _____ times the energy released by burning 1 g of coal.
(Choose only one answer)

A. one hundred
B. one thousand
C. one million
D. one billion

2. During nuclear fusion, which force overcomes the repulsion between hydrogen nuclei?
(Choose only one answer)

A. nuclear force
B. electromagnetic force
C. intermolecular force
D. strong nuclear force

3. What two methods are scientists researching to confine a fusion reaction?
(Choose only one answer)

A. kinetic confinement and plasma confinement
B. inertial confinement and kinetic confinement
C. magnetic confinement and inertial confinement
D. plasma confinement and magnetic confinement

4. Why is it important that neutrons are produced inside a nuclear reactor during a fission reaction?
(Choose only one answer)

A. The neutrons are used in the production of heavy water.
B. The neutrons collide with other uranium nuclei and a chain reaction occurs.
C. The neutrons bond together to form the uranium nuclei used to fuel the reactor.
D. The neutrons keep the water surrounding the fuel rods from overheating.

Name: _____ Date: _____ Per _____

5. How much energy will be produced when 1 g of matter is converted into energy? (Use 3.00×10^8 m/s for the speed of light.)
(Choose only one answer)

- A. 3.0×10^5 J
 - B. 9.0×10^{13} J
 - C. 3.0×10^8 J
 - D. 9.0×10^{16} J
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6. According to the video, what is one positive aspect of generating electricity through nuclear fusion?
(Choose only one answer)

- A. The reactors are inexpensive to build.
 - B. There is no chance of a nuclear catastrophe.
 - C. The technology is already in use and familiar.
 - D. There is a huge supply of fuel for the nuclear reaction.
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7. According to the video, what is one negative aspect of generating electricity by burning coal?
(Choose only one answer)

- A. The fuel is expensive.
 - B. The power plants are extremely expensive to build.
 - C. The power plant emissions have a negative impact on the environment.
 - D. An accident at a power plant would spread radiation throughout the environment lasting for years.
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THE GARBAGE STORY
Dealing With Solid Waste Disposal

Video Instructional Quiz

Directions: Mark the boxes on your answer sheet either True or False or fill in the blank with the correct answer when you hear the tone.

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1. [] [] We dispose of most of our municipal solid waste by burning it.
2. [] [] Some critics oppose incinerators because they feel they are a wasteful way of getting rid of garbage.
3. [] [] It takes about the same amount of energy to recycle aluminum cans that it does to mine and process the aluminum ore in the first place.
4. Trying to cut back on the amount of garbage we produce before it becomes a problem is called source _____ .
5. One of the aims of recycling is to use the things we throw away to make something _____ .
6. The potentially poisonous liquids that seep down through landfills are called _____ .
7. Waste-to-energy facilities use the heat from burning garbage to produce _____ .
8. Incineration can concentrate poisons, such as heavy metals, in the resulting _____ .
9. [] [] The decomposing organic material in landfills gives off methane gas.
10. [] [] Nationally, paper products make up over a third of our garbage.

THE GARBAGE STORY
Dealing With Solid Waste Disposal

Vocabulary Review

Directions: Match 1 through 10 below with the word(s) it defines at the bottom of the page.

1. _____ A gas that is often either burned or collected at landfills.
2. _____ The recovery and reuse of useful materials from waste.
3. _____ Poisonous, harmful.
4. _____ Is left when something is burned.
5. _____ Where we deposit most of our wastes.
6. _____ Where we burn trash. Sometimes heat from the process is used to produce electricity.
7. _____ The process by which solublecontaminants seep down to lower levels in a landfill.
8. _____ The process by which organic wastes are broken down by bacteria and fungi.
9. _____ Trash or garbage produced by our homes, institutions and commercial establishments, including schools, hospitals, restaurants and offices.
10. _____ Involves the manufacture and use of products that produce the minimum pollution, use the minimum packaging, and have a longer life.

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|--------------|--------------------------|
| A. Ash | B. Composting |
| C. Methane | D. Municipal Solid Waste |
| E. Toxic | F. Source Reduction |
| G. Recycling | H. Incinerator |
| I. Leaching | J. Landfill |