

Topic 8 - Electricity Production and the Environment

1. 65% of electrical energy around the world is generated by the burning of ...
 - A. wood
 - B. hydrogen
 - C. fossil fuels
 - D. dead plants
2. Many of the usable fuel resources we have, that are nonrenewable, are being used up. One of the following is a renewable resource.
 - A. coal
 - B. wood
 - C. natural gas
 - D. methane gas
3. To generate electrical energy, coal is used to produce steam that drives this ...
 - A. transformer
 - B. condenser
 - C. generator
 - D. turbine
4. Alberta uses a large amount of coal to generate electricity because it can be mined very easily. Strip mining has this negative impact ...
 - A. the original natural environment cannot be fully restored
 - B. all species of animals lose their habitat permanently
 - C. soil contamination occurs and cannot be reversed
 - D. dangerous chemicals can leach into the water table
5. Manufacturing and industrial plants install antipollution systems to remove harmful emissions, such as sulfur dioxide. These systems are called ...
 - A. reactors
 - B. bleachers
 - C. scrubbers
 - D. precipitators
6. By-products, from the generation of electrical energy, can be harmful to living organisms and to the environment. One such by-product reacts with water to produce ACID RAIN. The chemical that does this is ...
 - A. sulfur dioxide
 - B. nitrogen oxide
 - C. carbon dioxide
 - D. sulfuric oxide
7. Water can also be used to generate electrical energy. The energy conversion is ...
 - A. mechanical to gravitational to electrical
 - B. electrical to mechanical to gravitational
 - C. gravitational to electrical to mechanical
 - D. gravitational to mechanical to electrical
8. The narrow pathway in the dam which directs water to the turbines is called the ...
 - A. channel
 - B. spillway
 - C. penstock
 - D. generator
9. The Sun joins atoms together to make larger atoms, releasing a lot of energy in the process, whereas, a nuclear reactor, which splits atoms, also releases a lot of energy and is called nuclear ...
 - A. fusion
 - B. fission
 - C. uranium
 - D. plutonium

10. When industries cool down their machinery, warm wastewater can cause harm to aquatic ecosystems when it is returned to the water system. This is called ...
 - A. **radioactive waste**
 - B. **thermal generation**
 - C. **thermal pollution**
 - D. **industrial waste**

11. A system that can produce two different types of energy for industrial, or commercial use is called ...
 - A. **regeneration**
 - B. **cogeneration**
 - C. **electrolysis**
 - D. **bigeneration**

12. The thermal energy used to generate electricity from beneath the earth's surface is called ...
 - A. **tidal**
 - B. **geological**
 - C. **chemical**
 - D. **geothermal**

13. The International Space Station uses this type of energy to generate electricity for use on the station ...
 - A. **tidal**
 - B. **wind**
 - C. **solar**
 - D. **chemical**

14. A single windmill produces a small amount of electricity, but many connected together can generate a large amount of electricity. Many windmills connected together are called wind ...
 - A. **farms**
 - B. **arrays**
 - C. **groups**
 - D. **clusters**

15. A fuel cell uses this to generate electricity ...
 - A. **oxygen**
 - B. **hydrogen**
 - C. **nitrogen**
 - D. **carbon dioxide**