

Energy Resources: Study Guide

Match each term to its definition.

Terms: natural resource nonrenewable resource renewable resource
 fossil fuel generator

1. _____ a resource that is fairly easy to replace if it is used
2. _____ a useful material taken from the environment
3. _____ a machine that changes the mechanical energy of a turbine into electrical energy
4. _____ substances that cannot easily be replaced once they are used
5. _____ an energy resource that was formed from organisms that died long ago

Classify each resource as renewable or nonrenewable.

6. _____ coal
7. _____ wind
8. _____ natural gas
9. _____ water
10. _____ wood
11. _____ uranium
12. _____ solar energy
13. _____ heat trapped inside the earth
14. _____ biomass
15. _____ oil

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Match the term for each type of electrical energy to its original power source.

Word Bank:

hydroelectric

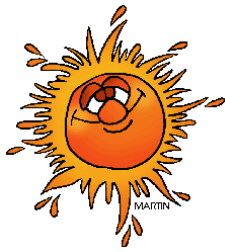
wind

solar

geothermal

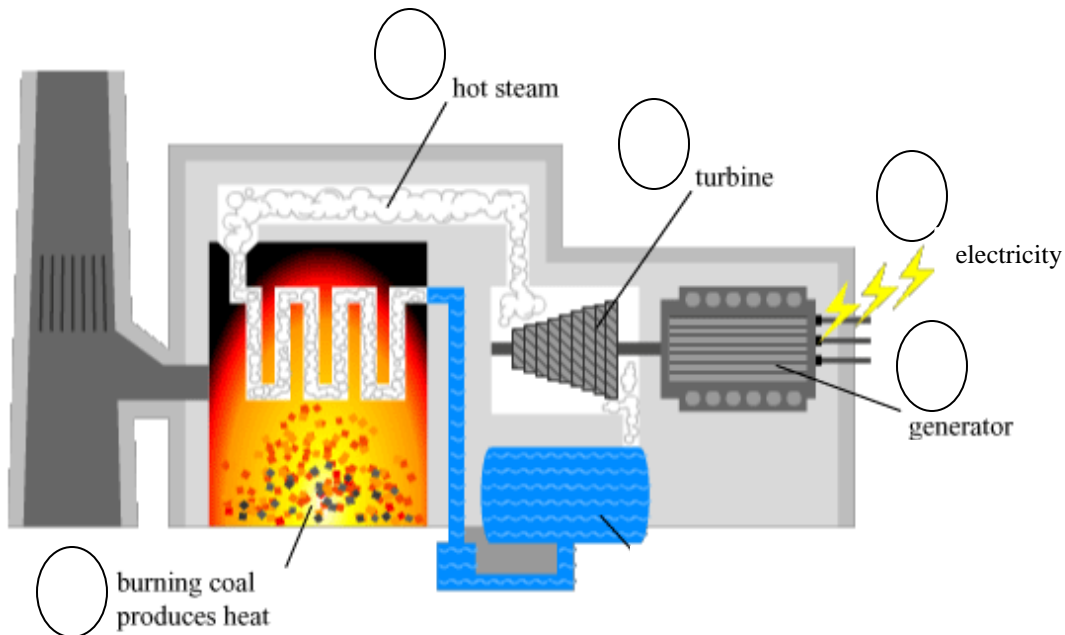
nuclear biomass

16. _____ energy comes from heat trapped inside the earth
17. _____ energy comes from the sun
18. _____ energy comes mostly from uranium atoms
19. _____ energy comes from moving water
20. _____ energy comes from burning organic matter that is now trash
21. _____ energy comes from moving air



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Number the diagram to show the sequence of steps in a fossil fuel power plant.



[http://www.hk-phy.org/energy/power/print/elect is print e.html](http://www.hk-phy.org/energy/power/print/elect%20is%20print%20e.html)

Fill in the blanks to complete the steps used to turn a fossil fuel into electrical energy. Use the diagram above to help you!

1. A fossil fuel is _____ in the boiler to produce heat.
2. The heat turns water into _____.
3. Inside the pipes, the steam pushes against the blades of a _____.
4. The blades are connected to a spinning shaft, which is connected to the _____.
5. The generator changes the mechanical energy of the spinning shaft into _____ energy.