Seventh Grade Pre/Post

Overview

Pre-test and post test questions are the same. Pre-testing elicits discussion involving predicting outcomes and educated guesses as to cause and effect. This is designed to make the class curious to find the answers. Post-testing asks the same questions as on a pre-test but the students should now be telling and reviewing the knowledge acquired through the activities.

Pre/Post Questions

1. What is solar energy?
2. What is a non-concentrating solar collector? How does it work?
3. What is a concentrating solar collector? How does it work?
4. Describe what heliostat does with the solar energy.
5. What is a photovoltaic cell? Explain how it works to provide electricity.
6. How efficient are photovoltaic cells?
7. Are they expensive?
8. Do photovoltaic cells produce any adverse effects on the environment? Explain.
9. What happens on days that are not sunny?
10. What is geothermal energy?
11. Where does geothermal energy come from? Explain.
12. What three ways do you classify geothermal energy?
13. What are the four basic fluid phases of geothermal energy?
14. Name the different heat sources which create geothermal energy.
15. Is a hot spring a geothermal site? Explain.
16. What is the average temperature of geothermal sites?
17. Can geothermal reservoirs go on indefinitely? Explain.
18. How long does it take to build a geothermal plant?
19. Is geothermal energy an efficient form of energy? Explain
20. Is it a costly source?
21. Would a geothermal plant create any adverse effects on the environment? Explain.
22. Where is most of the coal located in Arizona?
23. How is it removed from the ground?
24. There are four types of coal; name them and list each type of coal's carbon content. Why is carbon content important?
25. What are BTUs? Where did the term come from?
26. Is coal an efficient energy source? Explain.
27. Would a coal plant create any adverse effects on the environment? Explain.
28. Before electricity was brought to rural areas, what was an important energy source for farmers?
29. How long have windmills been around?
30. Can a windmill generate electricity? Explain.
31. Why are the new wind turbines more efficient today than windmills?
32. Can wind turbines generate enough power to supply a small town?

33. How does the earth produce wind current? Why is it important to know this when building wind turbines?
34. Are wind turbines an efficient energy source? Explain.
35. Would this type of electricity producer create any adverse effects on the environment? Explain.
36. Which energy source would you chose for a new power generation plant? Why?