

Energy Consumption Article Questions

Energy Use

1. How much energy does the average American use every day as compared to gallons of gasoline?
2. Define energy consumption.

Who Uses Energy?

3. What percentage of energy in the US is being used by each of the following groups?

Industrial Transportation Commercial Residential

Residential and Commercial Sectors

4. What is the difference between residential buildings and commercial buildings?
5. How are these buildings grouped together?
6. How much energy do homes and building consume all together?
7. What three fuels are most often used for heating and cooling homes?
8. What are the 3 categories for residential and commercial buildings main use of energy?
9. If furnaces (heaters) used in 1970'S homes were only 60 percent efficient, how much potential energy was lost when converting natural gas into usable heat?
10. What is 1 positive and 1 negative to florescent lighting?
11. What is 1 positive and 1 negative to LED lights?

Appliance Efficiency Rating

12. What does EER stand for?
13. What does EER tell us about an appliance?
14. What is the “payback period”?
15. If I bought an energy efficient washer for \$150 more than a non-energy efficient washer, and I save \$25 a year running it, how many years would my payback period be?
16. If I spend \$497 on washer 2, instead of 379 on washer 1 – how much more money do I need to spend upfront before I see any savings?
17. How much money do I save each year if I buy Washer 2 instead of washer 1?
18. What is my payback period for washer 2 (how many years must I own it before the savings outweigh the extra cost)?

Energy Consumption

19. The Industrial Sector accounts for 30% of all energy used in the US. What 6 companies make up the majority of the Industrial Sector?
20. What is another word for Petroleum?
21. What does the steel industry do?
22. What type of energy is mainly used to create steel?
23. How much energy do we save recycling steel instead of making it from iron ore?
24. How much energy do we now need, as compared to 40 years ago, when producing 1lb of aluminum?
25. How much energy is saved when we recycle aluminum vs. making new aluminum?
26. What is the US considered to be the world's leading producer and consumer in?
27. How do we use energy to make paper?
28. In 1973 how much energy, when compared in gallons of gasoline, is required to create one ream (500 sheets) of paper?
29. Today how much energy, comparable in gallons of gasoline, is required to make that same amount of paper?
30. What is concrete made of?

Transportation Sector

31. What vehicle uses more fuel than any other commercial vehicle?
32. Why do airlines want to make planes more energy efficient?
33. What are two ways that cars have changed from the 1970's to now?
34. How many more cars are on the road now than in 1973?
35. What was the average gas mileage of a car in 1973?
36. What is the average gas mileage of a car now in 2015-2016?
37. What are the 4 big types of transportation being used in the US?
38. What do they mean by "mass transit" (examples of mass transit)?
39. What are 2 reasons for the drop in people using Mass transit today than in the 1970's?
40. Why are people moving out of cities and into the suburbs?