

1. What is the total height, in km, of all of the world's people?
2. What is the average time interval, in seconds, between heart beats for any two people in the world?
3. What fraction of the sun's energy output is intercepted by the earth?
4. How many toothpicks, laid end-to-end, would be needed to enclose Delaware?
5. $8^{143} = ?$
6. Serge Bubka can pole vault slightly higher than 20 feet. How many times must he vault to cover the same distance as the earth to the moon?
7. Amy amoeba was accidentally placed in a bottle of Geritol. Suffering no ill effects, she had a new daughter 1 minute later. How many seconds did it take her family to fill up the bottle?
8. Hans Schwarzkopf when inspecting the Geritol bottle dropped it. How many days did it take for Amy & her daughters to swallow the earth?
9. College tuition has been going up at 5% per year while a scientist's salary is going up at 2%. Assuming a scientist makes 3 times the current tuition rate, how many years will pass until her salary is equal to the cost of tuition?
10. How many days will it take for an adult whale to circumnavigate the globe?
11. Assuming that everybody in the United States uses 3 dozen pencils a year, how many pounds of rubber is consumed?
12. Silas Marner saved his pennies until they covered the United States. How many did he have?
13. How many new telephone numbers became available when the three digit area code system was installed?
14. Assuming that the present rate of population doubling (36 years) hasn't changed since Adam & Eve, how many years ago was their son, Cain, born?
15. Magic Johnson is trying to set a new non-stop dribbling record. How many times can he bounce a basketball over a two-year period?
16. How many grams of metal are in the pennies saved by Silas (problem 12)?
17. How many miles of hair are grown per year by people in the United States?
18. What is the sheep population in the United States?
19. Estimate the number of gallons of gasoline burnt up each day in the U.S.
20. How many tons of carbon dioxide would be created each year by the combustion of gasoline (problem 19)?
21. Assuming that a tree could change a pound of carbon dioxide to oxygen in a month, how many trees would be needed to completely convert the carbon dioxide created in problem 20?
22. After his mistake in problem 8, Hans decided to take up conservation by planting maple trees that would be needed for problem 21. Assuming he plants them 10m apart, how large an area (sq. km.) would his forest cover?
23. What is the mass, in grams, of the toothpicks in problem 4?
24. During the time interval of a blink, how many km has light travelled in a vacuum?
25. What is the mass, in kg, of food consumed each day in the United States?
26. Assuming that 10% of the food consumed in problem 25 is protein, how many cows is that equivalent to?
27. Assume that one-third of all U. S. households has at least one leaky faucet. How many

gallons of fresh water will be wasted this year in the United States?

28. Estimate the number of blackbirds in a typical flock.
29. What is the mass, in grams, of air with the volume of a sugar cube?
30. While we're on the subject of sweets, estimate the number of tons of sugar consumed in the United States in 1990.