

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. A gigabyte is how many bytes?
  - A) A thousand
  - B) A million
  - C) A billion
  - D) A trillion
  
2. One kilobyte of memory can store about  $\frac{2}{3}$  of a page of typical text (excluding formatting). Suppose the typical book is 500 pages. Could a 4-gig flash drive hold tens, hundreds, thousands, or millions of such books?
  - A) Tens
  - B) Hundreds
  - C) Thousands
  - D) Millions
  
3. There are a thousand billions in a trillion.
  - A) True
  - B) False
  
4. For charity, a school collects 10 million pennies. How many dollars has the school collected?
  - A) \$10,000,000
  - B) \$1,000,000
  - C) \$100,000
  - D) \$10,000
  
5. A \$1 bill is 6.14 inches long, 2.61 inches wide, and 0.0043 inches thick. If you laid a million \$1 bills side by side lengthwise, how many miles would the trail be (to the nearest mile)?
  - A) 1000
  - B) 97
  - C) 1198
  - D) 479

6. Suppose it takes you 5 seconds to count to ten. How many days would it take you to count to a million? Round to the nearest day.
- A) 4
  - B) 5
  - C) 6
  - D) 7
7. Light travels at 186,000 miles per second. How many feet does it travel in a microsecond? (A microsecond is a millionth of a second.)
- A) 186.0
  - B) 982.1
  - C) 9821.0
  - D) 1860.0
8. You are borrowing \$8750 to buy a car. If you pay the loan off in 4 years (48 months), estimate your monthly payment by ignoring interest and rounding up the amount owed.
- A) \$182.29
  - B) \$183.33
  - C) \$185.76
  - D) \$187.50
9. You have a \$4200 student loan. Suppose you pay the loan off in 30 months. Estimate your monthly payment by ignoring interest and rounding down the amount owed.
- A) \$140.00
  - B) \$136.67
  - C) \$133.33
  - D) \$132.58
10. You are going on a 957-mile trip and your car gets 27 miles per gallon. Gas prices along your route average \$3.78 per gallon. Estimate the cost of gasoline for your trip by rounding up each of these values.
- A) \$133.98
  - B) \$133.33
  - C) \$130.29
  - D) \$121.60
11. If you had a million dollars in \$10 bills, how many bills would you have?
- A) 1,000,000
  - B) 100,000
  - C) 10,000,000
  - D) 10,000

12. A study found that your state currently has a deficit of \$2.3 billion dollars. If the population of your state is approximately 3 million people, then how much would each person in the state have to contribute to pay this deficit? Round to the nearest dollar.
- A) \$77
  - B) \$767
  - C) \$7667
  - D) \$7,667
13. 1,500,000 is the same as  $1.5 \times 10^6$ .
- A) True
  - B) False
14. Suppose you wanted to line up all the people in the world. (The world's population is about 6.8 billion people.) Assuming that each person takes up 12 inches of the line, how many times around the Earth would they reach? (Earth has a circumference of about 25,000 miles.) Round your answer to the nearest tenth.
- A) 92.1
  - B) 53.0
  - C) 51.5
  - D) 68.2
15. It is estimated that in 2009 the United States consumed 18,690,000 barrels of oil a day. A barrel of oil is 42 U.S. gallons. Assuming a U.S. population of 306,000,000, estimate how many gallons each person in the United States consumed each day in 2009 by rounding each number.
- A) 2.4
  - B) 2.5
  - C) 2.6
  - D) 2.7
16. It has been projected that the world's population by 2050 will be 9.34 billion people. If the projected U.S. population in 2050 is 438 million, what percent of the world's population will be the U.S. population? Round your answer to the nearest tenth of a percent.
- A) 5.1%
  - B) 4.9%
  - C) 4.7%
  - D) 4.3%

17. You need to buy carpet. One store advertises carpet at a price of \$1.60 per square foot. Another store has the same carpet advertised at \$14.00 “per yard.” (What the store really means is price per *square* yard.) Which is the better buy?
  
18. The land area of California is 155,959 square miles. As of 2008, the world's population was about 6.7 billion people. If in 2008 all the world's population were put into California, how many people would there be per square mile? Round your answer to the nearest whole number.