

Name _____

- 1) What is the surface area of a Honey Nut Cheerio in square furlongs?
- 2) A fresh AA alkaline battery is short circuited. How many electrons exit the negative terminal per second?
- 3) If a cow is fed exclusively paper, how many sheets of paper (letter-size) would it have to eat per pound of beef produced?
- 4) How many newtons would a human weigh if all their blood was replaced with liquid mercury?
- 5) Harry the human is a ripe age of 74. He has never cut his fingernails in his life (yuk!). How long would his fingernails be today, in centimeters?
- 6) How many molecules of vitamin C can be found in a typical naval orange?
- 7) How many dozen-boxes of donuts could be bought from Dunkin Donuts with the gross profit of Finding Nemo?
- 8) What is the area of the sector that the Mars sweeps out every Martian Sol, in square light-years?
- 9) Uh oh spaghetti! You have encountered some spaghetti. How many jars of spaghetti sauce would it take to cover the entire surface of Mars with 1 cm of sauce?
- 10) How many liters of ink does a 0.5 mm ballpoint pen need to draw a circle the size of a penny?
- 11) How many gallons of water can be dropped onto the face of a quarter before it overflows and spills?
- 12) You are on a plane headed toward Tokyo, Japan. The plane is 123,456 meters in the air. If you jump out of the plane, how long (in milliseconds) would it take for you to splat on the ground?
- 13) How many methane molecules does the average human fart out in a year?
- 14) $\ln(200!)$
- 15) The energy released by the explosion of two sticks of dynamite is enough to evaporate how many kilograms of water?

- 16) How many metric tons of water vapor is contained within the earth's atmosphere?
- 17) How many times does the average person blink while watching Toy Story?
- 18) How many seconds does it take a TI-84 graphing calculator to compute $\sum_{n=1}^{99999} n^3$?
- 19) $\sum_{n=1}^{99999} n^3$
- 20) How many grams of hydrogen are there in a wooden 1 foot ruler?
- 21) How many miles long is a woodpecker's tongue?
- 22) How many neurons does the average adult human brain contain?
- 23) How many physics problems does the extended 8th edition of *Fundamentals of Physics* by Halliday and Resnick contain?
- 24) How many gradians would the second hand of a clock have traced out if the clock has kept perfect track of time since March 26th, 1846?
- 25) How many times more dense is Earth compared to Jupiter?
- 26) How many molecules of water are contained in Saturn's rings?
- 27) 2^{99}
- 28) How many calories of energy does the average adult human convert into heat daily?
- 29) How many seconds would it take the average penguin to swim from antarctica to the arctic, if it swam in a straight line without interruptions?
- 30) What is the average distance between two adjacent ions in table salt, in meters?
- 31) What is the average speed of earth around the sun, in meters per second?
- 32) A 1-liter carton of milk is emptied. Then the carton is placed on top of a tank of water. How many staples could be put inside the carton of milk before it sunk?

Bonus:

How many pounds of feathers would it take to have the same mass as 40 pounds of bricks?