

Science Olympiad C division Fermi Questions Test

Names: _____

Score: _____/300

Directions: Report your answers on the answer sheet in orders of magnitude. See the specifications for this event for more information.

1. How many Bic Cristal pens would weight as much as all of the garbage thrown out daily in New York City?
2. How much would a line of Thomas Saf-T-Liner C2 school busses stretching from New York City to Los Angeles weigh in Kilograms?
3. The US department of education's 2016 budget could buy how many twinkies? (before tax)
4. With the number of twinkies from the previous question, how many twinkies could you give to each child in America?
5. What is the average male human height in terms of the distance from the earth to the sun?
6. What is the weight of the number of pennies you would need to purchase a new Rolls Royce Phantom at base price, in grams?
7. What is the total value of all the real estate in Manhattan? (dollars)
8. How many millimeters could a 2017 Toyota Carolla drive with the amount of gasoline one could purchase with the amount of money from the previous question? (assuming highway mpg)
9. How many drops of water are in the dead sea?
10. If a marathon runner could keep his pace forever, how long would it take him to travel one light year in seconds?
11. What is the length of a crayon in light years?

12. How many ants would have same same mass as the Statue of Liberty?
13. How much would a stack of quarters as tall as the Eiffel Tower be worth in dollars?
14. How many iPad Airs have the same mass as the earth?
15. How much would enough orange juice to fill the great pyramid of Giza cost in dollars?
16. How many hydrogen atoms are in the sun?
17. How many ping-pong balls would fit in a 747 jet?
18. How many pounds of food are wasted annually in the US?
19. How many dump trucks would be needed to carry \$1 billion in pennies?
20. How many tennis balls would fit in the Titanic?
21. How many basketballs could one fit into the sun?
22. How many stacked iPhone 5s would be needed to reach from the Earth to Mars?
23. How long was the average T Rex in nanometers?
24. How long would it take a slug to travel from New York City to Los Angeles in seconds?
25. How many gallons of gas do Americans consume each day?
26. How many drops of rain fall on the US daily?
27. How many cows could you buy with the GDP of India?
28. How many cattle are there on earth?
29. How many fast food restaurants are in the United States?
30. How many graphing calculators does TI sell annually?
31. How many boxes of cereal are purchased annually in the US?
32. How many gallons of milk are produced yearly in the US?
33. How many cars are there on the earth?
34. How many homicides occur in the US annually?

35. How many cities with over 150,000 people are on Earth?
36. How much money is spent in Las Vegas daily?
37. How many trees are there on earth?
38. How many golf courses are there in the world?
39. Assuming that all of those golf courses have 18 holes, how many seconds would it take John Lomeo (golfing legend) to play every single one? (assuming it takes him the USGA standard time to play 18 holes)
40. A Classic, how many piano tuners are there in Chicago?
41. How many plastic bags are used annually on Earth?
42. What is the width of a Carbon atom in terms of football fields?
43. What is $5+5$?
44. What is the age of the universe in dog years?
45. How many practicing dentists are in the US?
46. How much money spent on pet food annually in US?
47. How many text messages are sent around the world daily?
48. What is the price of a large Pizza Hut pizza in terms of all the money in circulation in the US?
49. How much does an Asian elephant weigh in AMU?
50. What is the thickness of an A4 piece of paper in astronomical units?
51. How many moles of blue whales are alive today?
52. What is the average daily human hair growth in light years?
53. How many songs did Mozart write?
54. How many hours of video are watched on YouTube each month?

55. How many tweets are tweeted on Twitter every second?
56. How many mobile devices are there in the world?
57. How many people are killed annually in car crashes?
58. What is the total number of words in all of the Harry Potter books?
59. How many letters do Canadians send to Santa each year?
60. How many leaves does the average adult oak tree have?