

Estimathon

Pleasanton Math Circle: Middle School

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§1 Problems

1. How many humans, in billions, have ever lived on Earth?
2. How many phone call minutes, in billions, were made in the United Kingdom in 2022?
3. How many Eiffel Towers does it take, rounded up to the nearest Eiffel Tower, to stack one on top of each other to the height of Mount Everest?
4. As of 2016, how many gallons of water does the average Californian use per day?
5. How large is California in square miles?
6. What is the 893rd prime number?
7. A Scoville Unit is used to measure spiciness. For example, the jalapeno has about 4000 Scoville units. What is the Scoville rating of the spiciest pepper in the world, the Carolina Reaper?
8. What is the runtime, in minutes, of Zack Snyder's Justice League?
9. How long would it take to fly around the world in hours?
10. How long would it take in minutes for an average male athlete to run an Olympic triathlon, which consists of 1500 meters of swimming, 40 kilometers of biking, and 10 kilometers of running?
11. How what is the median age of a US President when he first took office?
12. What is the average amount of time it takes to read all of the Harry Potter books?
13. How long would it take to listen to all of Mozarts known works?
14. How many active users per month were on Discord?
15. How many miles of navigable roads are there in the US?
16. How many tweets are sent per second worldwide, on average?
17. How thick would a stack of \$1 million in \$100 bills be?
18. How many blades of grass are there on a square foot of land, on average?
19. What is the average temperature at the Earth's inner core in degrees Fahrenheit?

20. How many websites are currently on the internet, in millions?
21. How many times does an average adult blink in a year?
22. How many times does the word "the" appear in Shakespeare's complete works?
23. Expressing in 10^x , how many water molecules are on Earth's surface?
24. How many times does the average person curse in a day?
25. How many Oreos are made per hour?