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Fermi Questions - General Collection

1. The mass of how many Ford Falcons is equal to the mass of the water in the swimming pool at the [Brisbane Girls' Grammar School](#) in Australia?

(Based on lesson plan by Summer '96 Math Forum Institute Peter Moulds)

2. How many jelly beans fill a one-liter jar?
3. What is the mass in kilograms of the student body in your school?
4. How many golf balls will fill in a suitcase?

You might want to first assume that the diameter of the golf ball is 1". An extension to the problem would be: How many balls with a 2" diameter would it take to fill the suitcase?

5. How many gallons of gasoline are used by cars each year in the United States?
6. How high would the stack reach if you piled on trillion dollar bills in a single stack?
7. Approximately what fraction of the area of the continental United States is covered by automobiles?
8. How many hairs are on your head?
9. What is the weight of solid garbage thrown away by American families every year?
10. If your life earnings were doled out to you at a certain rate per hour for every hour of your life, how much is your time worth?
11. How many cells are there in the human body?
12. How many individual frames of film are needed for a feature-length film? How long is such a film?

The following questions were developed by K-12 students

13. How many water balloons will it take to fill the school gymnasium?
14. How many flat toothpicks would fit on the surface of a sheet of poster board?
15. How many hot dogs will be eaten at major league baseball games during a one year season?

16. How many revolutions will a wheel on the bus make during our seventh grade trip from Baton Rouge, LA to Washington, D.C.?
17. How many minutes will be spent on the phone by middle school students in the United States?
18. How many pizzas will be ordered in your state this year?

This section will be expanded as new questions are contributed.

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