

Fermi Questions



Objective:

To estimate quantities which are either difficult or impossible to measure directly.

Rules:

1. Each team will be provided with a list of Fermi questions.

An example of a Fermi question is:

How many drops of water are there in the Long Island Sound?

2. Answers are to be given to the nearest order of magnitude.

Example: Acceptable answer: 10^3

Unacceptable answer: 2×10^3

3. One point will be deducted for each answer which is not in acceptable form.
4. Questions must be answered in the allowed time.
5. Only one set of answers may be submitted by a team.
6. Calculators and other electronic devices are not permitted.
7. Reference materials are not permitted.
8. No work needs to be shown.
9. Each answer which agrees with the accepted answer will be awarded 10 points. One point will be subtracted for each order of magnitude different from the accepted value, to a minimum of 0 points.

Tiebreaker: The time to complete the event will serve as a tiebreaker.

Time limit: 15 minutes.