

## Fermi Questions: What Do We Need to Know?

*Enrico Fermi is considered to be the father of “solving maths problems we will never know the exact answer to.” He developed difficult math questions that challenge students to estimate the answers. Typically, these kinds of problems are used to get students to think mathematically, but more importantly, they get students to use problem solving skills. Do you know what else requires problem solving skills? **RESEARCH!***

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**Step 1:** For your group’s assigned question, use the space below to list ALL of the questions you need answers to in order to estimate an answer to that question.

1. How many oreo cookies would it take to fill this room?
2. How many minutes will be spent texting (solely texting) in one year by high school students in the United States?
3. How many packets are needed to measure a single line of M&Ms to a distance of 100m?
4. How big a block of chocolate could you make using all the chocolate eaten by the class in a year?
5. How many times could a basketball player bounce a ball during his/her/their teenage years if he/she/they didn’t stop to eat, sleep, etc.?

**Step 2:** First, identify your research question. Then, below the question, list **ALL** the questions you need answers to in order to develop an answer to that question.

**Step 3:** Identify the first three questions that need to be answered using stars.