

# LARGE NUMBER ESTIMATION

## Description:

Students will be asked to estimate the answers to approximately twenty questions requiring an estimate between ten and one million.

Number of Participants: 2

Approximate Time: 30 minutes

## The Competition:

1. The questions will follow the following format:

Question	Estimate (Circle One)
a. How many pennies in the jar?	10, 100, 1,000, 10,000 100,000, 1,000,000
b. How many two centimeter paper-clips could be laid end to end across a standard football playing field?	10, 100, 1,000, 10,000 100,000, 1,000,000

2. *No calculators will be allowed.*

3. When estimating, round off to the nearest power of ten, for example, 50,001 would be closer to 10,000 than 100,000 and 45 would be closer to 10 than to 100.

### EXPLANATION:

1. round 50,001 to 50,000

100,000	50,000
<u>- 50,000</u>	<u>-10,000</u>
50,000	40,000

50,000 away from 100,000

40,000 away from 10,000

4. Hands-on items may be felt by the students.

## Scoring:

1. Points will be awarded on the following scale:

Right on .....	5 points
Within one power of 10 .....	3 points
Within two powers of 10 .....	1 point

2. The team with the most points wins.

3. In case of ties, the greatest number of 5-point estimates will determine the winner.

