KC's Quantitative Problems Entropy and 2nd Law of Thermodynamics

• *Thermodynamics.Entropy-2nd-Law.***Qp.KC.1:** In the dice game *Entropia* each player has two, identical four-sided dice that are rolled each round. The game lasts very long and there are thousands of players, so you decide to employ the aid of statistics.

A.) Make a table of all the combinations of two dice configurations (micro states) and the corrisponding total number of each combination (macro state).

- B.) What is the probabilty of each macro state?
- C.) How can entorpy be used to understand the outcome of a large number dice rolls?