1135-Q5-268 Frederick A Peck* (frederick.peck@umontana.edu), Department of Mathematical Sciences, University of Montana, 32 Campus Drive #0864, Missoula, MT 59812, and Matt B Roscoe (matt.roscoe@umontana.edu), Department of Mathematical Sciences, University of Montana, 32 Campus Drive #0864, Missoula, MT 59812. Let's get cracking: Russian egg roulette.

Russian egg roulette is a regular feature of The Tonight Show. Two players take turns cracking eggs over the other's head. The players choose eggs from a uniform-looking set that includes four hard boiled and eight raw eggs. A player loses when she has two raw eggs cracked on her head.

Egg roulette is ideally suited to math circles:

- 1. Participants engage in an enjoyable and intense kinesthetic game
- 2. The intensity and jocularity of the game helps to build community
- 3. The game evokes a wide range of "natural" questions
- 4. The game can be easily modified, leading to vastly different questions
- 5. Questions can be addressed experimentally and theoretically
- 6. Investigations often involve multiple probability laws, concepts, and tools

Common questions include, "what is the maximum number of rounds?," "what is the probability of a 'clean cap'—a winner with no eggs broken on her own head?," and "is it better to go first or second?" Variations include parameterizing the number of raw and hard boiled eggs, drawing eggs from a distribution where the number of raw and hard boiled eggs are unknown and even changing the winning conditions (e.g., the person with the third egg broken on her head is the loser). (Received August 16, 2017)