Roman Wong* (rwong@washjeff.edu), Mathematics Department, Washington and Jefferson College, Washington, PA 15301, and Tyler Raspat (raspattj@washjeff.edu), 60 South Lincoln Street, Washington and Jefferson College, Washington, PA 15301. The unexpected expected value.

This activity involves finding the expected total value on two chips drawn at random from a bag containing several chips marked with various dollar values. (For example, in a bag containing 10 chips, we may have two chips marked 10, four marked 5, three marked 1, and one marked 0.) The experiment is performed twice, once by drawing the two chips with replacement, and secondly by drawing without replacement. The activity will provide the students with a feel for the meaning of expected value, as well as practice in computing the probability and the mean of a discrete random variable. Data from the experiment are collected and compared to both the theoretical results and simulated results obtained from an Excel program. The students will be surprised by the results from the two obviously different experiments. (Received September 07, 2007)