The under representation of women in mathematics and science is well established. To help combat this problem, a two week mathematics, science, and engineering camp was held in June 2000 for 24 underprivileged girls. The camp was a collaborative effort of three faculty members from the disciplines of biology, engineering and mathematics. Since we wanted to expose the campers to successful math and science students from various levels, we recruited six local high school students and six college students to serve as mentors for the campers. Using the tiered mentoring approach, we were able to give individual attention to each camper. During the camp, the girls (assisted by their mentors) participated in hands on activities from the fields of mathematics, science, and engineering. In this paper, I will discuss the camp activities, the use of the tiered mentoring system and some of the results from the camp. (Received October 03, 2000)