Here are some questions to answer using the binomial distribution.

1. What is the probability you roll exactly one six in four rolls?

2. Mendel Problems: A couple has four children. Recall each parent gives one of their genes to their child. If both parents are heterozygous with respect to eye color (Bb), what is the probability three of their kids have brown eyes (i.e. have at least one B?

3. 6th Grade Problems: To raise money for the field trip, you have to sell 5 candy bars. There are 30 houses within walking distance, each of which will buy a candy bar with probability .4 and won't with probability .6. With no other opportunities to sell candy, what is the probability your parents will have to buy some of the candy bars?