Name: .....

Period : .....

Experimental or Theoretical probability? John flips a fair coin 60 times and get heads 33 times. Based on his results, the \_\_\_\_\_\_ probability of getting heads when flipping a fair coin is 33/60 or 0.55.

## A pet store contains 35 light green parakeets (14 females and 21 males) and 44 sky blue parakeets (28 females and 16 males). Arrange this information in a two-way table.

	Male	Female	Total
Light Green Parakeet	21	14	35
Sky Blue Parakeet	16	28	44
Total	37	42	79

## You randomly choose one of the parakeets. (Give answers as the fractions; you do not need to reduce.)

- 2. What is the probability that it is a Light Green Parakeet?
- 3. What is the probability that the randomly chosen parakeet is both green and male?
- 4. What is the probability that the randomly chosen parakeet is female, given it is green?
- 5. Find P(Male)
- 6. Find P(Male and Sky Blue)
- 7. Find P(Male or Sky Blue)
- 8. Find P(Male | Sky Blue)

## A bag contains 5 blue marbles, 7 green marbles, and 3 red marbles.

- 9. You randomly select one marble. What is the probability that it is blue or green?
- 10. Suppose you select 2 marbles. You randomly pull out a marble, **replace it**, then pull out a second marble. What is the probability that you selected 2 red marbles?
- 11. You randomly pull out 2 marbles, <u>without</u> replacing the first. What is the probability that you get 2 red marbles?