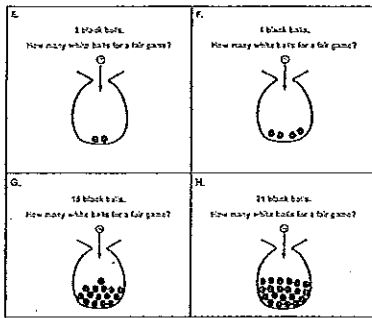


Name _____ Period _____



Simulation Homework

- 1) Each student in a class of 38 students was asked to report how many siblings (brothers and sisters) he or she has. The data are summarized in the table below.

Number of Siblings	0	1	2	3	4	5	6
Count	8	13	12	3	1	0	1

- a) Based on these data, estimate the probability that a randomly selected student from this class is an only child.
- b) Based on these data, estimate the probability that a randomly selected student from this class has 3 or more siblings.
- c) Consider the following probability distribution for the number of siblings:

Number of Siblings	0	1	2	3	4	5	6
probability	0.15	0.35	0.30	0.10	0.05	0.03	0.02

Explain how you could use simulation to estimate the probability that you will need to ask at least 5 students if each is an only child before you find one that is an only child.