Law of Large Numbers
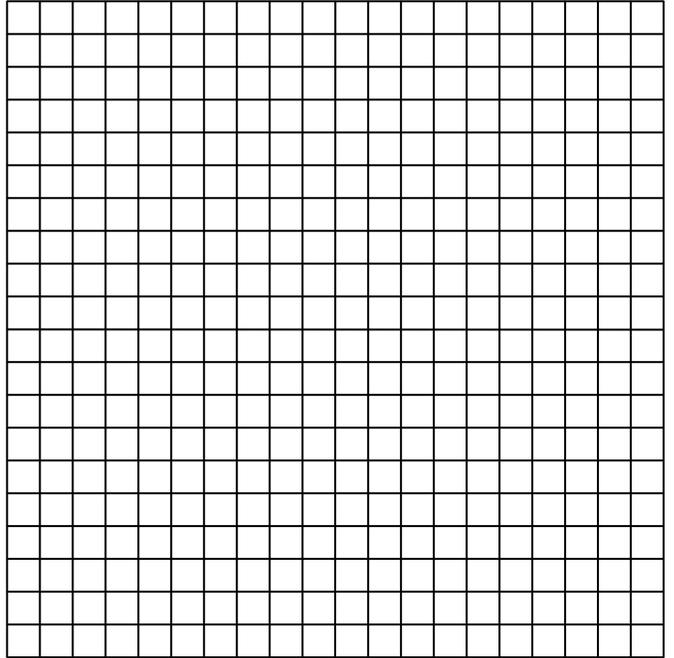
Draw a histogram for the distribution of theoretical probabilities the sum of rolling 2 dice.

Sum	Probability
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

Roll your two dice 10 times. Calculate the experimental probabilities and draw a histogram.

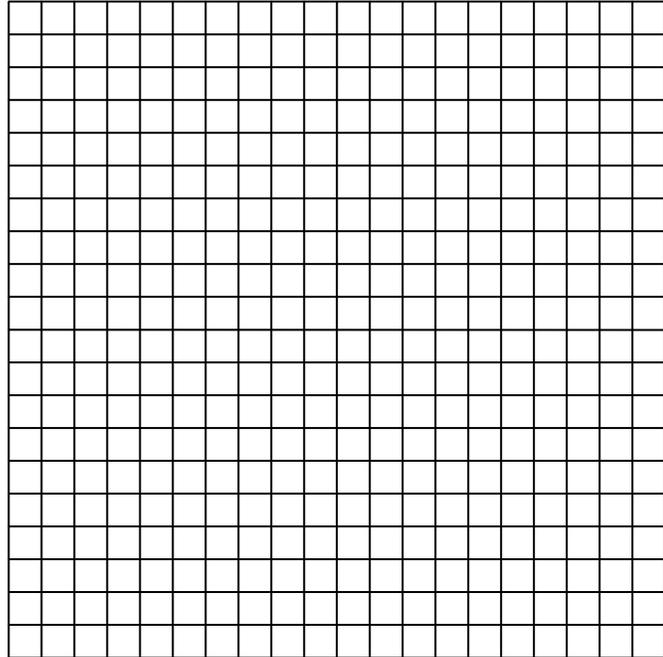| Sum	Probability
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
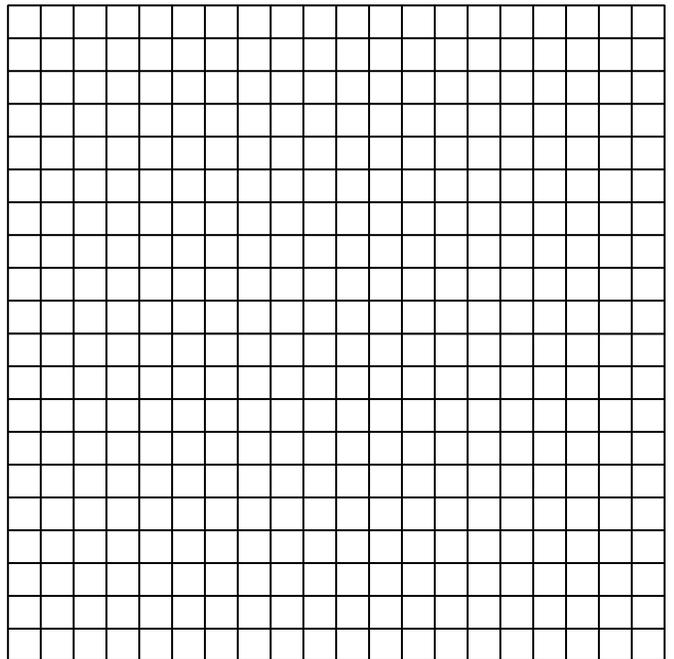
1. *Compare this histogram to the theoretical histogram?*

Roll your two dice 100 times. Calculate the experimental probabilities and draw a histogram.

Sum	Probability
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

2. *Compare this histogram to the theoretical histogram?*

3. *Compare this histogram to the one you made by rolling the dice 10 times? Which is closer to the theoretical?*

4. *Make a conjecture about how closely the experimental probabilities would match the theoretical if you rolled the dice 1000 times.*

Sum	Frequency (for 10 rolls)
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

Sum	Frequency (for 100 rolls)
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	