Tally sheet for drawing three marbles from a bag of six

First activity: You have six marbles, 3 of one color (call it color 1), 2 of a second color (call it color 2), and 1 of a third (call it color 3). On each draw, you take three from the bag and record their colors.
Record here your actual colors: 1 is _____, 2 is _____, 3 is_____.

There are 6 possible outcomes, 111, 112, 113, 122, 123, and 223. Make 50 draws, and record your outcomes by making an x for each one in the table below.

out-come	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
111																									
112																									
113																									
122																									
123																									
223																									

out-come	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	total out of 50	total x 2 = %
111																											
112																											
113																											
122																											
123																											
223																											

Compare your totals to the theoretical probabilities.

outcome	my percentages	theoretical probability
111		5%
112		30%
113		15%
122		15%
123		30%
223		5%