

# Instructions

For this activity, you will need two different coins. First, you will determine the theoretical probability of events. Then, you will flip the coins 100 times and determine the experimental probability of the events.

Flip two different coins 100 times, and record the results of each coin toss in a table like the one below:

Result	Frequency
Two heads	
Two tails	
One head, one tail	

Answer the following questions based on the data you gathered. You must show your work to receive credit.

1. What is the theoretical probability that a coin toss results in two heads showing?
2. What is the experimental probability that a coin toss results in two heads showing?
3. What is the theoretical probability that a coin toss results in two tails showing?
4. What is the experimental probability that a coin toss results in two tails showing?
5. What is the theoretical probability that a coin toss results in one head and one tail showing?
6. What is the experimental probability that a coin toss results in one head and one tail showing?
7. Compare the theoretical probabilities to your experimental probabilities. Why might there be a difference?