

Partner #1 \_\_\_\_\_

Partner #2 \_\_\_\_\_

## Probability "Flipping Coins" Station

Flip one coin two times. Repeat this 20 times. Tally your results in the table below. Then use your results to answer the questions. Be sure to note the difference between flipping heads, then tails (HT) compared to flipping tails first and then heads (TH).

Possible Outcomes	HH	HT	TH	TT
Tally				
Total				

1. What is the theoretical probability of flipping two tails?

$$\frac{1}{4}$$

2. What is the experimental probability of flipping two tails?

Answers will vary

3. What is the theoretical probability of flipping any combination of heads and tails?

$$1 \quad (100\%)$$

4. What is the experimental probability of flipping any combination of heads or tails?

Answers will vary

6. a. Theoretically, are you more likely to get a pair (HH or TT) or a combination (HT or TH)?

They are equally likely  
both are  $\frac{2}{4} = \frac{1}{2}$

- b. Did your results show this to be true? Why or why not?

Answers will vary