## ELIPPIN゚G $\mathcal{A}$ COIN:

Ab Experiment in Probabildty
Nopme $\qquad$
Date __ Period ___

1. What is the theoretical probability of getting tails:
... in general? $\qquad$
... after 10 trials? $\qquad$
... after 20 trials? $\qquad$
... after 50 trials? $\qquad$
2. With a partner, flip a coin 50 times, stopping after 10 and 20 trials to answer the questions below.

| Trial | Outcome | Trial | Outcome | Trial | Outcome | Trial | Outcome | Trial | Outcome |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 |  | 11 |  | 21 |  | 31 |  | 41 |  |
| 2 |  | 12 |  | 22 |  | 32 |  | 42 |  |
| 3 |  | 13 |  | 23 |  | 33 |  | 43 |  |
| 4 |  | 14 |  | 24 |  | 34 |  | 44 |  |
| 5 |  | 15 |  | 25 |  | 35 |  | 45 |  |
| 6 |  | 16 |  | 26 |  | 36 |  | 46 |  |
| 7 |  | 17 |  | 27 |  | 37 |  | 47 |  |
| 8 |  | 18 |  | 28 |  | 38 |  | 48 |  |
| 9 |  | 19 |  | 29 |  | 39 |  | 49 |  |
| 10 |  | 20 |  | 30 |  | 40 |  | 50 |  |

3. What is your experimental probability of getting tails:
... after 10 trials? $\qquad$
... after 20 trials? $\qquad$
. after 50 trials? $\qquad$
4. What do you notice about your experimental probability as the number of trials increases?
$\qquad$
$\qquad$
5. How many tails would you expect to get in 100 trials, based on your theoretical probability? $\qquad$
6. How many tails would you expect to get in 100 trials, based on your experimental probability? $\qquad$
