## Coin Flip Investigation

Name: $\qquad$ Date: $\qquad$

I can identify events where the chance of one will not be affected by the occurrence of the other. (ACMSP094)

Flip one coin 10 times and record each flip as a tally mark. Equipment I will need:

- $1 \times$ coin
- pencil
- activity sheet

Instructions:

1. Flip the coin.

2. Record the result as a tally mark whether the coin landed on 'heads' or 'tails' in the correct space in the table below.
3. Repeat steps 1 and 2 nine more times (so that you have flipped the coin 10 times).

Coin Flip Results for 10 Flips:

|  | Tally | Total |
| :--- | :---: | :---: |
| Heads |  |  |
| Tails |  |  |

You are now going to repeat the experiment but for 20 flips. Make a prediction on what you think the results will be. Will it be the same as your first set? Why/why not?

My prediction is: $\qquad$

Complete the coin flip chance experiment again.
Coin Flip Results for 20 Flips:

|  | Tally | Total |
| :--- | :---: | :---: |
| Heads |  |  |
| Tails |  |  |

Was your prediction correct? Why/why not?

If you were to complete this chance experiment again for 40 flips, do you think the results would be the same? Why/why not?
$\qquad$
$\qquad$

If you flipped heads five times and tails fifteen times, does this mean that tails will also have the larger number of flips next time you complete this activity? Why/why not?


