## Coin Flip Chance Experiment

I can perform repeated trials of a chance experiment and discuss the results. (ACMSPO67).

Flip one coin 12 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 eleven more times (so that you have flipped the coin 12 times).

Before you begin make a prediction on what you think the results will be.
My prediction is: $\qquad$
Coin Flip Results:

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

Was your prediction correct? Why/why not?
$\qquad$
$\qquad$
If you were to complete this chance experiment again do you think the results would be the same? Why/why not?

## Complete the coin flip chance experiment again.

My revised prediction is: $\qquad$
Coin Flip Results:

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

## Coin Flip Questions

Do you think that there is an even chance of flipping a head or tail? Why/why not?
$\qquad$
$\qquad$
Was your revised prediction correct? Why/why not?
$\qquad$
$\qquad$
Are the second tally results the same as your first coin flips?

What is different?

What is the same?

Why do you think there is/is not a difference in the two coin flip results?

If you were to complete this chance experiment again but flip the coin 40 times do you think the results would be similar? Why/why not?

