1. The player must participate in two events.

- Rolling the die
- Picking from a deck of cards
- Spinning a spinner
- Toss a coin.

2. State how the player can win the game and what the theoretically probability of winning is. Use math facts and calculations to support your answer.

- Ex. Winner must roll a 5 on the die AND get a TAILS when they toss a coin
- Ex.  $\frac{1}{6} \times \frac{1}{2} = \frac{1}{12} \approx 8.3\%$  of winning

3. Include pictures of what items will be used for this game.



- \$3 to play the game once.
- Winner gets \$10.
- How much money would you raise if 50 people played the game?
- Use the information from the table on the right to fill in the financial table below.

| Trial | \$ Collected | \$ Paid out | Balance |
|-------|--------------|-------------|---------|
| 1     |              |             |         |
| 2     |              |             |         |
| 3     |              |             |         |
| 4     |              |             |         |
| 5     |              |             |         |
| 6     |              |             |         |
| 7     |              |             |         |
|       |              |             |         |

During Open House about 150 people come into the POD area. Make a prediction what the profit be if all the people played your game?

Formula: (Fee to play the game) X 150 = (Number of winners) X (the prize cash) = Subtract the two answers

Write a summary conclusion. After all the trials and results were collected, please explain to me why your game should be chosen for the Open House carnival. What would persuade the customer to try your game? Is there any piece of evidence that would make your game profitable for the team? Conclusion should be typed and all spelling should be correct.

Do the experiments 50 times and record the results of each trial. Use the table I made to record the data and glue it on this side of the folder.

| Trial | Outcome |
|-------|---------|
| 1     |         |
| 2     |         |
| 3     |         |
| 4     |         |
| 5     |         |
| 6     |         |
| 7     |         |

• Based on the table and 50 trials, what would be the experimental probability of winning this game? Write the answer as a ratio and percent please.