**Probability Project
By: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

For this experiment, you will create and complete a probability experiment in groups of 2-3. **Theoretical probability** is the theoretical likelihood of an event occurring. For example, if you flip a coin 10 times, it should land on heads 5 times and tails 5 times. **Experimental probability** is what actually occurs when an event is tested.

1. Create a probability experiment. You may use spinners, dice, coloured blocks or a coin. Explain your project below. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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2. Determine the theoretical probability of the event occurring. Keep in the mind the formula for theoretical probability:


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3. Perform the probability experiment 100 times. Tally the results below.

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4. Determine the difference (if any) between the theoretical probability and the experimental probability. In order to do so, divide the predicted outcome by the actual outcome.

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