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## Experiments and Events:

- What is an event?

An event is the outcome or set of outcomes of an experiment.

- What is a sample space?

Sample space is the set of all possible results of an experiment.

- How to model the experiment of tossing a fair/unfair coin?

Flip a coin a certain number of times and write down how many times it lands on heads and how many times it lands on tails.

- What is permutation/combination?

Permutation is the arrangement of a set of objects, with regard to the order of the arrangement. While combination is the arrangement of a set of objects, without regard to the order of the arrangement.

## Conditional Probability:

- How to model the Venn Diagram?

Draw 2 circles that overlap on the sides and put similarities between the 2 topics in the center.

- What is Bayes' Theorem?

The probability of an event based on other information that may or may not be related to the event

- What is Law of Total Probability?

The Law of Total Probability breaks up probability calculations into distinct parts.

- What does it mean when we say two events are independent of each other?

The events do not affect the probability of the other.