

10.1 Likelihoods:

	Impossible	Unlikely	Equally Likely	Likely	Certain
Description	not possible	having a poor chance of success	same chance of happening as not happening	having a good chance of success	sure to happen

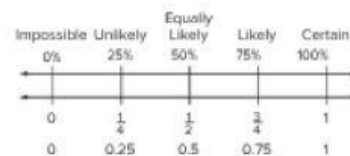
10.2 Relative frequency and Experimental

Words	Relative frequency is the ratio of the number of favorable outcomes to the total number of outcomes in an experiment.
Ratio	$\frac{\text{number of favorable outcomes}}{\text{total number of outcomes}}$

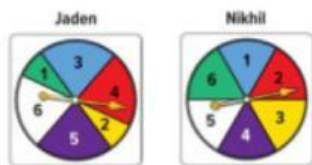
Words	Experimental probability is the ratio of the number of favorable outcomes to the total number of outcomes.
Ratio	$P(\text{event}) = \frac{\text{number of favorable outcomes}}{\text{total number of outcomes}}$

10.3 Theoretical probability

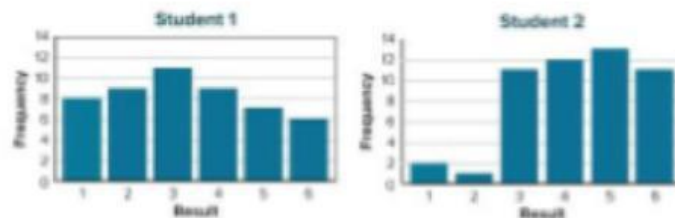
Words	Theoretical probability is the ratio of the number of favorable outcomes to the total number of outcomes.
Ratio	$P(\text{event}) = \frac{\text{number of favorable outcomes}}{\text{total number of outcomes}}$



10.4 Compare events: Decide which event is shown by which graph. Use the size of the spinner to decide.



Jaden is Student 2, and Nikhil is Student 1.

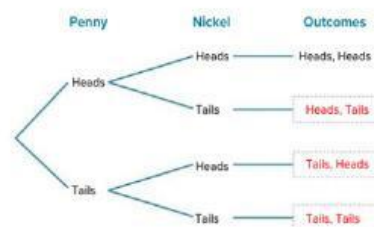


10.5 Probability of

Learn Sample Space for Compound Events

A **compound event** consists of two or more simple events.

As with simple events, the sample space for a compound event is the set of all possible outcomes.



10.6 Simulations

Is an easier way to show an experiment that is complex (difficult).

Five different events are shown in the table. Choose the model that can be used to correctly simulate each event by placing an X in that column.

Event	Spinner with Four Equal-Size Sections	One Coin Toss
your favorite book out of four books being randomly assigned for a book report	X	
your favorite baseball team has $\frac{1}{2}$ probability of winning	X	
a $\frac{1}{2}$ chance a girls' soccer team wins its first game		X
forecast shows a 50% chance of rain		X
a marble is randomly chosen from a bag containing four different color marbles	X	