http://www.math.csusb.edu/faculty/stanton/m262/intro_prob_models/intro_prob_models.html

Probability distribution for tossing 2 coins.

x			
P(x)			

http://regentsprep.org/Regents/math/tree/Ltree.htm

Independent events: knowing A occured doesn't tell us any additional information about B.

Disjoint events: A and B can't both happen.

ActivStats III 14-2 Independence

Events A & B are independent if $P(A)=P(A|B)$

One trial: Rolling one die...

	Disjoint	Not Disjoint
Independent	Impossible	even & curved number
Not Independent	even & odd	even & prime

Two trials:

	Disjoint	Not Disjoint
Independent	Impossible	heads on a coin & 6 on a die
Not Independent	Dem elected Pres & GOP elected VP	raining & playing baseball

Word order matters!
P(girl|has a pink phone) $\neq$ P(has a pink phone|girl)

What is the probability...

a person is a Canadian who speaks French?

a Canadian speaks French?

a person is Canadian if he speaks French?

a person speaks French if he is Canadian?

I flip a coin 3 times. What is the probability I get at least one head?

First, consider the Sample Space

I roll a die 3 times. What is the probability I get at least one 4?

Suppose a test for a genetic disorder is 95% accurate and that 10% of the population has the disorder.
What is P(infected|positive)?