**Probabilities Examples for Cards and Dice**

There are 52 cards in a deck. If you pull out a card at random, what is the probability that it will be red?

If you pull out a card at random from a full deck, what is the probability that it will be a face card (ie. J,Q,K,or A)?

If you pull out a card at random, what is the probability that it will be an Ace? How about a red Ace?

Suppose you pull a card at random and it is a Jack. What is the probability that the next card you take out will also be a Jack (assuming you do not return the original jack to the deck)?

What is the probability of pulling two Jacks in a row at random (assuming you do not return the first Jack)? How does this probability change if you return the first Jack to the deck and then pull again?

On a six-sided die, what is the probability of rolling a two?

What is the probability of rolling an even number?

If you roll two dice at the same time, what is the probability of rolling both threes?

What is the probability of the sum of a two-dice roll equal to 4? (It may help to write out the possible combinations)

BONUS: If you roll 6 separate six-sided dice, what are the odds of rolling six of a kind? (ie. 3,3,3,3,3,3 or 4,4,4,4,4,4)