PROBABILITY

Probability tells us how likely it is for something to happen.

When we flip a coin, it's equally likely that we'll get heads or tails. There are two possible outcomes, and one of the outcomes is heads, so we say that the probability of getting heads is $\frac{1}{2}$ or 50%.

In general, when we have a random event with equally likely outcomes, the probability of something happening (like getting heads) is:

$$\text{PROBABILITY} = \frac{\text{Number of outcomes where it happens}}{\text{Total number of possible outcomes}}$$

This is a fraction, and usually we simplify the fraction. For example, if we roll a regular die, the probability of rolling an even number is:

$$\frac{3 \leftarrow \text{since there are 3 even numbers on a die}}{6 \leftarrow \text{since there are 6 total}}$$

But this fraction is the same as $\frac{1}{2}$.

Try some of the practice questions and check your answers at:

www.phas.ubc.ca/~mav/math/math