## 1 | Introduction to Probability

Probability: the likelihood of something happening

- · "Success"
- "Failure"

At the moment, those are the two categories.

## 1.1 | A Statistical Trial

Each trial is an event with an outcome. Say, your case for "success" is rolling a 6. All other events are considered as a "failure"

Therefore...

$$Prob(success) = \frac{\# times \ sucess}{\# trials}$$
 (1)

Statistics is not a hard and fast mathematical thing.

## 1.1.1 | Definitions

In order to perform the trials, we need to define a few things.

X - Random Variable

There is a basic bell curve that comes with most trials, given the x = X, and the y is the count.

We don't want to sample the whole population, so we therefore want to sample a subset.

1.1.2 |