Probability & randomness

Before we can understand probability we first have to understand another concept: **randomness**. The first video explains this concept. It also shows that even though randomness is everywhere around us, humans are nonetheless bad in assessing it.

Once we understand randomness we can define **probability** as a way to **quantify randomness**. The second video explains how this quantification can be accomplished by experiments which record the **relative frequency** that certain **events** of interest occur. It follows that probabilities are always **larger or equal to zero** and **smaller or equal to one**; and also that the **sum of the probabilities for all possible events equals one**. Due to the very nature of random events, the experiments may have to continue for a while before the relative frequencies represent the probabilities accurately, but the law of large numbers dictates that it will do so eventually.