



## Probability and Relative Frequency

### Today's Standard

7.SP.C6 - Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.

### Real-World Applications for this Standard

Predicting outcomes in sports events; Estimating weather patterns; Forecasting stock market trends; Determining the likelihood of winning a game of chance; Predicting the success rate of a new product launch

### Today I Learned

Today we learned about probability. Probability is the chance that something will happen, like rolling a 3 on a number cube. We can predict how often something will happen by collecting data and watching how often it happens over a long time.

### Common Stumbling Blocks

Sometimes kids think that if the chance of something happening is 1 out of 3, it will happen exactly that many times. But really, it's about what happens over a long time. Also, kids might think that if something happens a lot in a short time, it will always happen that way, but that's not true.

### Quiz Me

- What is probability?
- How can we find out the chance of something happening?
- What does it mean if something happens a lot in a short time?
- Why do we need to look at lots of tries to understand probability?
- Can we always predict exactly how many times something will happen?

### Help Me

Probability helps us understand how likely something is to happen. For example, if we flip a coin many times, we can see how often it lands on heads or tails. This helps us predict what might happen in the future, even if

we can't be exact every time.