



## Understanding Probability

### Today's Standard

7.SP.C5 - Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around  $\frac{1}{2}$  indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.

### Real-World Applications for this Standard

Predicting weather patterns; Determining outcomes in games of chance; Risk assessment in insurance; Forecasting stock market trends; Quality control in manufacturing

### Today I Learned

Today, we learned about probability. Probability is a number between 0 and 1 that tells us how likely something is to happen. A number close to 0 means it probably won't happen, close to 1 means it probably will happen, and around 0.5 means it might or might not happen.

### Common Stumbling Blocks

Sometimes, kids think that if something has a probability of 0.5, it will happen half the time. But it actually means it is equally likely to happen or not. Another mistake is thinking that a high probability means something will definitely happen. But even with a high chance, it might not happen.

### Quiz Me

- What is probability?
- What does a probability near 0 mean?
- What does a probability near 1 mean?
- What does a probability of 0.5 mean?
- Can something with high probability not happen?

### Help Me

Probability helps us understand how likely something is to happen. For example, if the weather forecast says there's a 90% chance of rain, it means it's very likely to rain, but not certain. We use probability to make

decisions, like carrying an umbrella if there's a high chance of rain.