

# What Do You Expect? Overview

## Investigation One - Evaluating Games of Chance

D.PR.08.05

Find and/or compare the theoretical probability, experimental probability, and/or the relative frequency of a given event

D.PR.08.04b

Calculate the probabilities using organized lists or tree diagrams

## Investigation Two - Analyzing Situations Using an Area Model

D.PR.08.05

Find and/or compare the theoretical probability, experimental probability, and/or the relative frequency of a given event

D.PR.08.03a

*Compute relative frequencies from a table or experimental results for a repeated event*

D.PR.08.03b

*Interpret the results using relationships of probability to relative frequency*

D.PR.08.04a

*Apply the Basic Counting Principle to find total number of outcomes possible for independent and dependent events*

D.RP.08.06

*Understand the difference between independent and dependent events, and recognize common misconceptions involving probability, e.g., Alice rolls a 6 on a die three times in a row; she is just as likely to roll a 6 on the fourth roll as she was on any previous roll*

## Investigation Three - Expected Value

D.PR.08.05

Find and/or compare the theoretical probability, experimental probability, and/or the relative frequency of a given event

N.MR.08.10

Calculate weighted averages such as course grades, consumer price indices, and sport ratings

## Investigation Four - Binomial Outcomes

D.PR.08.05

Find and/or compare the theoretical probability, experimental probability, and/or the relative frequency of a given event