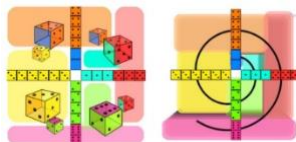# 7th Grade Unit 5: Investigating Probability

Overview:

In the fifth unit of seventh-grade math, students will begin an exploration of probability and chance processes. Students will develop probability models to find the likelihood of simple events and make predictions using simulation' information. Students will compare theoretical and experimental probabilities of events and explain discrepancies. Students will continue to deepen their knowledge of part-whole strategies by exploring and developing probability models using simple events. Students investigate and learn the probability of a chance event is a number between 0 and 1. They will develop a probability model and use it to find probabilities of events.

Learning Targets:

In Unit 5, students will:

- Represent the probability of a chance event as a number between 0 and 1 that expresses the likelihood of the event occurring.
- Approximate the probability of a chance event by collecting data on an event observing its long-run relative frequency will approach the theoretical probability.
- Develop a probability model and use it to find probabilities of simple events.
- Develop a uniform probability model by assigning equal probability to all outcomes and use the model to determine probabilities of events.
- Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process.
- Compare experimental and theoretical probabilities of events.
- Use appropriate graphical displays and numerical summaries from data distributions with categorical or quantitative (numerical) variables as probability models to draw informal inferences about two samples or populations.

Key Vocabulary: (linked to GA DOE Interactive Glossary)

Categorical Data	Chance Event	Data Distributions	Experimental Probability
Inferences	Interquartile Range	Mean	Mean Absolute Deviation
Measures of Center	Median	Numerical Data	Outcomes
Predictions	Probability	Probability Model	Quantitative
Range	Relative Frequency	Simple Events	Theoretical Probabilities

Supporting Resources:

https://gavirtual.instructure.com/courses/34330

Identify Outcomes and Make Predictions

What is the Mean of a Data Set?

How Do you Find the Range of a Data Set?

Find Probability

Probability as a Fraction

What is Probability?

What is the Mode?