Instructional Flow — Unit 7 — Probability

I. Prior Knowledge Activation

- activating background knowledge
- pre-assessing student understanding

II. Events That Are Not Equally Likely

- determining whether outcomes of events are equally likely
- making connections to prior learning of simple probability for equally likely events
- finding the probability of events that do not have equally likely outcomes

III. Counting Outcomes

- using the Fundamental Counting Principle to count outcomes
- demonstrating the Fundamental Counting Principle using tree diagrams
- finding the probability of an event using the Fundamental Counting Principle

IV. Permutations

• investigating, defining, and applying permutations

V. Combinations

- investigating, defining, and applying combinations
- explaining the difference between permutations and combinations
- identifying whether permutations or combinations are used to solve a problem

VI. Composite Events

• determining the probability of composite events, including independent, dependent, and mutually exclusive events

VII. Odds

- computing the odds in favor of or against an event
- explaining the relationship between odds and probability

VIII. Simulations

 exploring models and experiments that may be used to simulate events and predict probability