

Math 7 Strategies 1

Pletcher
September Lessons - Probability

Unit Objectives - Math 7 PSSA

ASSESSMENT ANCHOR

M07.D-S.3 Investigate chance processes and develop, use, and evaluate probability models.

DESCRIPTOR

M07.D-S.3.1 Predict or determine the likelihood of outcomes.

ELIGIBLE CONTENT

M07.D-S.3.1.1 Predict or determine whether some outcomes are certain, more likely, less likely, equally likely, or impossible (i.e., 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).

ASSESSMENT ANCHOR

M07.D-S.3 Investigate chance processes and develop, use, and evaluate probability models.

DESCRIPTOR

M07.D-S.3.2 Use probability to predict outcomes.

ELIGIBLE CONTENT

M07.D-S.3.2.1 Determine the probability of a chance event given relative frequency. Predict the approximate relative frequency given the probability.

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.

M07.D-S.3.2.2 Find the probability of a simple event, including the probability of a simple event **not** occurring.

*Example: What is the probability of **not** rolling a 1 on a number cube?*

M07.D-S.3.2.3 Find probabilities of independent compound events using organized lists, tables, tree diagrams, and simulation.

Rules of Probability to remember

Probability is between 0 (unlikely) to 1 (likely)

Use probability percent TIMES a set of trials to predict

“Not” is $(1 - \text{Probability})$ as a shortcut to ADDING up each individual ones for simple probability. Studyisland.com has this as Simple Probability section.

Compound probability is multiplying events together. For example rolling an even number and flipping a coin on Heads.

Outcomes sample space: List, tree diagram, simulation, etc to show ALL possibilities

Week Sept. 25 Lesson Overview - use studyisland.com

Monday: See next slide on activity lesson “Evaluating Probability Events”

Tuesday: Play Rock Paper Scissors

- Discuss the possible outcome sample space $\{RR, RP, RS, SS\dots\}$ with probability of winning or tying with 2 people. Is it a FAIR game?
- Then change the rules for Mrs. Pletcher 3 person rules. Do a tree diagram and list of the possibilities and probabilities. Is it a FAIR game?

Wednesday: Complete any studyisland.com GROUP sessions with Mrs. Pletcher

Thursday: Students work on any under 70% studyisland.com sessions.

Friday: TEST on outcomes and probability - midway through the nine weeks.