

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.

Week Sept 11 Lesson Overview

9/11 Monday: Review Spinner Bingo Notes - Play a few rounds

<https://www.nctm.org/adjustablespinner/>

9/12 Tuesday Use a GROUP Session of Studyisland Probability Selections for notes.

9/13 Wed. Finished Group Session and started individual sessions on 3 sections.

Understanding Probability (10 items & 70%) M07.D-S.3.1.1	Approximate Probability (10 items & 70%) M07.D-S.3.2.1	Probability of Simple Events (10 items & 70%) M07.D-S.3.2.2
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9/14-15 We reviewed individual session but continued to improve scores by redoing sessions that fell below 70%

Week Sept. 18 Lesson Overview - use [studyisland.com](https://www.studyisland.com)

Monday: 2nd Group Class Session with the “Approximate Prob.” as this was the hardest section. Each student gets a hardcopy of problems to write down methods, answers, and additional notes for these.

Tuesday: Students continue to do the individual sessions to get the best score on the Approximate Probability.

Wednesday: Individual Session on Compound Probability on [studyisland.com](https://www.studyisland.com)

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

Friday: No Class as Powerpuff Game for Homecoming

Thursday Activity:

Students begin by completing 1st page of Evaluating Statements about Probability “Are they Correct”.


Review answers together as a class.

Continue with the 2 bags of jellybean exploration question and then true and false questions in groups. Finish by completing the “revisit” worksheet. Link from <https://www.map.mathshell.org/lessons.php?unit=7415&collection=8>

Sample:

2. Susan claims:

If a family has already got four boys, then the next baby is more likely to be a girl than a boy.



Is she correct? Explain your answer fully: