# Math 7 Strategies 1

Pletcher
Week Oct. 30  Probability

# Week of Oct. 30-Nov 1, 2023

Monday: Use handout about analyzing a game of chance

https://www.map.mathshell.org/lessons.php?unit=7420&collection=8

Class had already done the bingo introduction page. Horse Race activity will be done today.

Tuesday: Use handout about activity “Comparing Data Using Statistical Measures”

https://www.map.mathshell.org/lessons.php?unit=7410&collection=8

Wednesday: Play Math 24 Challenge,

check folders for classwork completion,

complete gummy bear simulation

Thursday - new class for quarter

Estimating with fraction and simplifying fraction handout

# 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-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 possiblilities

# Next Unit - October 5 pickup

| ASSESSMENT ANCHOR | | | |
|---|---|---|---|
| **M07.D-S.1** | **Use random sampling to draw inferences about a population.** | | |
| | **DESCRIPTOR** | | **ELIGIBLE CONTENT** |
| **M07.D-S.1.1** | Use random samples. | **M07.D-S.1.1.1** | Determine whether a sample is a random sample given a real-world situation. |
| | | **M07.D-S.1.1.2** | Use data from a random sample to draw inferences about a population with an unknown characteristic of interest.<br>*Example 1: Estimate the mean word length in a book by randomly sampling words from the book.*<br>*Example 2: Predict the winner of a school election based on randomly sampled survey data.* |

| ASSESSMENT ANCHOR | | | |
|---|---|---|---|
| **M07.D-S.2** | **Draw comparative inferences about populations.** | | |
| | **DESCRIPTOR** | | **ELIGIBLE CONTENT** |
| **M07.D-S.2.1** | Use statistical measures to compare two numerical data distributions. | **M07.D-S.2.1.1** | Compare two numerical data distributions using measures of center and variability.<br>*Example 1: The mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team. This difference is equal to approximately twice the variability (mean absolute deviation) on either team. On a line plot, note the difference between the two distributions of heights.*<br>*Example 2: Decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.* |

# Unit Objectives - Math 7 PSSA

| ASSESSMENT ANCHOR | | | |
|---|---|---|---|
| M07.D-S.3 | Investigate chance processes and develop, use, and evaluate probability models. | | |
| | **DESCRIPTOR** | | **ELIGIBLE CONTENT** |
| **M07.D-S.3.1** | Predict or determine the likelihood of outcomes. | **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 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** | | **ELIGIBLE CONTENT** |
| **M07.D-S.3.2** | Use probability to predict outcomes. | **M07.D-S.3.2.1** | Determine the probability of a chance event given relative frequency. Predict the approximate relative frequency given the probability.<br>*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.<br>*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. |