# Math 7 Strategies 1

Pletcher September Lessons - Probability

# Next Unit - October 5 pickup

ASSESSMENT ANCHOR				
M07.D-S.1	Use random sampling to draw inferences about a population.			
	DESCRIPTOR	11/34/1	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.	
			Example 1: Estimate the mean word length in a book by randomly sampling words from the book.	
			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.2.1.1 M07.D-S.2.1 Use statistical measures to Compare two numerical data distributions using measures of center and variability. compare two numerical data distributions. 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. 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 fourthgrade science book.

### Week October 9 Overview

Monday - no class as teacher inservice = holiday

Tuesday -

Review last weeks test --- focus on sample outcome calculation

Samples -- possible outcomes is a counting principle in compound prob.

Counting Principle Examples ---

Sampling - random sampling means equal chances.

**Population** - A population is an entire group of persons or elements that have at least one thing in common (Minnesota fourth graders, Moorhead State University summer school students).

**Sample** - A sample is a group of persons or elements selected from the total population.

Random sampling - Random sampling is where each member of the sample is randomly selected from the population.

Sampling bias - Sampling bias is caused by systematic errors in the sampling process. For example, take one-fourth of the students in a class as a sample to use in a research study. Send out notes to the parents requesting permission for their child to participate in the study and then select those students whose parents give permission first as the sample for the study.

Sample size - In general, the larger the sample size, the more representative it is of the population.

### Sampling Analysis

Characteristics of a representative **sample**, such as its mean, median, or mode, can be used to predict the mean, median, or mode of the entire **population**.

## Week Oct 10 Continue

#### Wednesday & Thursday

Complete notes using a GROUP session off of studyisland made from Sampling Analysis section. Student have a copy of questions to write notes down on as we complete it together.

6. M07.D-S Statistics and Probability				
a. Sampling Analysis	10 items & 70%	M07.D-S.1.1.1; M07.D-S.1.1.2		
b. Compare Data Sets	10 items & 70%	M07.D-S.2.1.1		

#### **Friday**

Students complete online themselves for the day.