

Unit Plan by Prioritized Standards

Content Area	7th Grade Math
Grade/Course	7th Math
Unit of Study	Unit 5 - Inferences
Duration of Unit	9 days

Insert priority standards below (include code). **CIRCLE or Highlight** the **SKILLS** that students need to be able to do and **UNDERLINE** the **CONCEPTS** that students need to know. **(address “supporting” standards in daily lesson plans)**

MGSE7.SP.2 **Use** data from a random sample to **draw** inferences about a population with an unknown characteristic of interest. **Generate** multiple samples or simulated samples of the same size to **gauge** the variation in estimates or predictions. *For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.*

Skills (what must be able to do)	Concepts (what students need to know)	DOK Level / Bloom's
Use	Data from a random sample	1/2
Draw	Inferences	2
Generate	Multiple samples or simulated samples	3
Gauge	The variation in estimates or predictions	3

Step 5: Determine BIG Ideas (enduring understandings students will remember long after the unit of study)	Step 6: Write Essential Questions (these guide instruction and assessment for all tasks. The big ideas are answers to the essential questions)
<p>Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population.</p> <p>Understand that random sampling tends to produce representative samples and support valid inferences.</p> <p>Use data from a random sample to draw inferences about a population with an unknown characteristic of interest.</p>	<p>What are different sampling techniques used in real life?</p> <p>How do I determine an appropriate sample size?</p> <p>How can random samples be used to make predictions about populations?</p> <p>How are proportions used to estimate information about populations?</p> <p>How does the data describe its center, spread and representation of the population?</p>

<p>Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions.</p> <p>Informally assess the degree of visual overlap of two numerical data distributions with similar variability, measuring the difference between the centers by expressing it as a multiple of a measure of variability.</p> <p>Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations.</p>	<p>What is the difference between the measure of center and measure of variation?</p> <p>How do I display data on a number line?</p> <p>What are ways to summarize numerical data sets?</p>
---	---

Essential Unit Vocabulary

- **Box and Whisker Plot**
- **Frequency**
- **Grouped Frequency Table**
- **Histogram**
- **Inter-Quartile Range (IQR)**
- **Maximum value**
- **Mean**
- **Measures of Center**

- **Measures of Spread**
- **Median**

- **Minimum value**
- **Mode**

- **Mutually Exclusive**
- **Outlier**
- **Range**
- **Sample**
- **Simple Random Sampling**
- **Stem and Leaf Plot**

Next step, create assessments and engaging learning experiences