# **Rotation 5: Sampling**

Content Area: Mathematics

Course(s):

Time Period: Default
Length: Rotation 5
Status: Published

## **Summary**

- Explain the purpose of sampling and which methods of obtaining a sample tend to produce representative samples.
- Use measures of center and measures of variability from random samples to draw conclusions about and compare populations.

# **Standards**

MA.7.SP.A.1	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. Understand that random sampling tends to produce representative samples and support valid inferences.
MA.7.SP.A.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.
MA.7.SP.B	Draw informal comparative inferences about two populations.

#### **Materials**

# Desmos Grade 7 Unit 8

### **Lesson 9:** Car, Bike, or Train?

- I can calculate the mean and mean absolute deviation (MAD) for a data.
- I can compare and contrast populations using mean and MAD.

#### Lesson 10: Crab Island

- I can explain what a sample is and when it is useful.
- I can compare the means of samples to the mean of the population.

#### **Lesson 11:** Headlines

• I can explain why a sampling method is or is not likely to produce a biased sample.

#### **Lesson 12:** Flower Power

• I can use proportional reasoning and a sample to estimate information about a population.

# **Assessment**

- Observation
- Cool Downs
- Quizzes