# **Unit 4a Measurement and Data**

Content Area: Math

Course(s): Math 6 Honors
Time Period: Marking Period 4

Length: Weeks 1-4 Into Math Advanced 1 Unit 5

Status: Published

#### **Essential Questions**

How can you solve real-world problems by displaying, analyzing, and summarizing data?

#### **Big Ideas**

- Measures of center, box plots and measures of spread can be used to describe a data set.
- Determine and use the mean absolute deviation of a set of data points.

### **Diversity Integration**

Objective: Students will create a quilt of their assigned country's flag.

Description of Activity

Students will measure the area of each shape on the quilt to determine the amount of material needed.

## **Enduring Understandings**

**Expressions and Equations** 

6.EE.2c Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.

Statistics and Probability

7.SP.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.

- 7.SP.5 Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. 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.
- 7.SP.6 Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. For 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.

#### **Mathematical Practices Focus**

- 1. Make sense of problems and persevere in solving them. Lesson 13.1, 13.3, 14.1, 15.1,
- 2. Reason abstractly and quantitatively. Lesson 13.2, 13.4,14.1, 14.2, 15.1, 15.2, 15.3
- 3. Construct viable arguments and critique the reasoning of others. Lesson 13.1,13.2, 13.3, 14.1, 15.1, 15.3
- 4. Model with mathematics. Lesson 13.1, 13.2, 13.3, 13.4, 14.1, 14.2, 15.1, 15.2, 15.3
- 5. Use appropriate tools strategically. Lesson 13.1, 13.2, 14.1, 14.2,
- 6. Attend to precision. Lesson 13.4, 14.2, 15.1, 15.2, 15.3
- 7. Look for and make use of structure. Lesson 13.1, 13.2, 13.3, 13.4, 14.1, 15.2,
- 8. Look for and express regularity in repeated reasoning. Lesson 15.3