

7th Grade Math Lesson Plans  
*Cactus Canyon Junior High*  
*7<sup>th</sup> Grade Math*  
**Week of April 12-16, 2021**

**Monday-Tuesday**

**Essential Question:** How do I calculate MAD when given a graph?

**Objective:** I can calculate the Mean Absolute Deviation of a data distribution set.

**Standard:** 7.M.SP.3.02

**Mindset:** IXL Diagnostic

**Anticipatory Set Monday:**

See chart below. Discuss how MAD is the average distance from the average.

Assuming this is a class size of only 4 students:

<u>Student Name</u>	<u>Test Score</u>	<u>Personal Distance from Avg.</u>	<u>Class Distance from Avg</u>
Jay	60	-12.5	$= 7.5$ <b>MAD</b>
May	70	-2.5	
Kay	80	7.5	
Bay	80	7.5	

$= 72.5$

**MEAN**

**Anticipatory Set Tuesday:** We said last week that an ideal MAD would be zero, because that means the data doesn't vary at all. When might it be a good idea to have a large MAD, meaning the data varies a lot? (weather-someone who likes the seasons; food-eating different types of food; wages-want to have different wages or why would anyone go to college to better themselves; age-when surveying others opinions about community needs)

**What:** Review Mean Absolute Deviation with students. Show dot plot from test scores, and model how to find the mean absolute deviation (MAD) from the graph. **Academic Conversation** regarding what the information tells us. **Guided Practice:** Use Wilsert class sizes to demonstrate how the information/data could be presented in a graph. Ask students how to find the mean absolute value (MAD) from a graph. **Independent Practice:** Continue on IXL CC.5.

**Closure:** Turn & Talk with your partner/group and explain in your own words how you find the MAD from a dot plot (graph).

**How:** Whole group modeling while students watch the board and record. Independent practice on pets.

**Why:** Finding the mean of the distances each value is from the mean will help students when using mean in real life. Businesses might use this to estimate growth or decline in sales compared to years past.

**DOK 3-4:** What did you learn today that you didn't know before?

In your own words, how is the MAD different from the Mean?

Does anyone have another way we could set this up?

### Wednesday

**Essential Question:** How do I calculate Mean Absolute Deviation?

**Objective:** I can calculate and compare the mean absolute deviation of data distribution sets.

**Standard:** 7.M.SP.B.03

**Mindset:** IXL Diagnostic

**Anticipatory Set:** Have students fill out a silly, teacher created, Math Lib.

**What: Partner Activity:** MAD Math Lib

**Closure:** On the back of your paper, please explain how to find MAD in your own words.

**How:** Whole group mindset and anticipatory set. Independent or partner work on Math Lib.

**Why:** Finding the mean of the distances each value is from the mean will help students when using mean in real life. Businesses might use this to estimate growth or decline in sales compared to years past.

**DOK 3-4:** Does our answer make sense? Explain.

Does anyone have the same answer but a different way to explain it?

What concepts that we have learned before were helpful in solving this problem?

### Thursday-Friday

**Essential Question:** How can I gather information that is representative and without bias?

**Objective:** I can draw inferences about a population using data.

**Standard:** 7.SP.A.02

**Mindset:** IXL Diagnostic

**Anticipatory Set:** If Wilsert wanted to advocate for the building of a dog park in AJ, what things would need to

**What:** Introduce **Vocabulary:** Bias & Unbiased, Populations, Census, Sampling and Representative. **Academic**

**Conversation:** Ask students if given scenarios are biased or unbiased. Also discuss if a sampling is random or not random, Also determine when a sample would be better than a census. **Activity:** Sort scenarios into bias and unbiased, independently, at first. After students have had time to sort scenarios, go over it using SMART technology.

**Closure:** Revisit what you wrote at the beginning of the lesson about the dog park. How would you modify what you wrote? How would we go about getting a sample? Who all would have to be asked? What question could we use for the survey?

**How:** Whole group vocabulary and academic conversation. Independent work on sort activity. Whole group closure.

**Why:** Students will be able to discern between useful and non-useful data when researching.

**Assessment:** Teacher Observation

**DOK 3-4:** Why do you say that?

What factors need to be considered?

Do you agree or disagree? Explain.