Got Math?

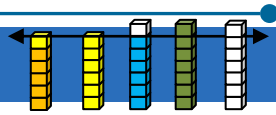
A Newsletter from the Secondary Mathematics Team www.rpdp.net

Southern Nevada Regional Professional Development Program

CCSS MINI-SERIES MS #2

NEVADA ACADEMIC CONTENT STANDARDS

Modeling the "Mean" (Grades 6-8)



As we integrate the Nevada Academic Content Standards (NACS based on Common Core) into our math classes, we should be mindful that students need to conceptually understand the concept of "mean." Be sure to give them time to experience that mean is an "equal distribution" or everyone getting a "fair share".

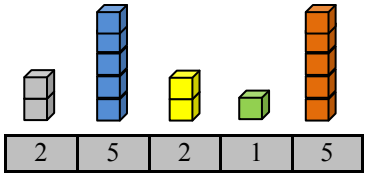
One way to do this is to bring a large bag of treats (e.g. M&M's, Jolly Ranchers, etc.) and distribute them to students at random in varying amounts. The students who get nothing will usually begin to comment or complain that they didn't get any and others will say they didn't get their share or they got less than their neighbor. This sets the stage for a great discussion on "equal distribution" or "fair share" where everyone gets the same amount.

Another way to do this is give a problem and have students solve it using unifix cubes, blocks, chips, etc.

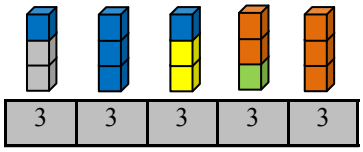
Example 1: The table shows the number of students absent from 4th period last week. What was the mean number of students absent per day?

Day	# of students absent
Monday	2
Tuesday	5
Wednesday	2
Thursday	1
Friday	5

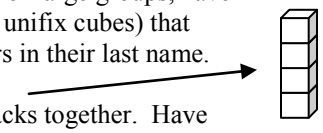
1. Have students model the data using their manipulatives.



2. Have students "even out" or "equally distribute" the counters until each column has the same number of counters. (remind students they have 5 columns, Monday – Friday, and must have 5 columns in the end.)

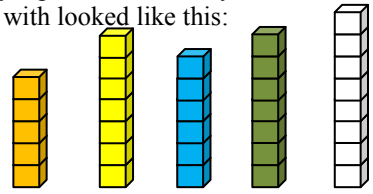


Example 2: With whole class or large groups, have each student create a stack (of unifix cubes) that represents the number of letters in their last name. (eg. Long = __ __ __ __)

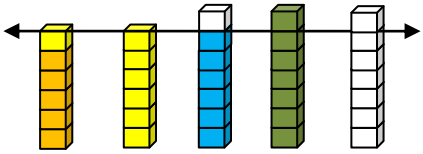


Have students display their stacks together. Have students compute the mean of the letters in their classes last names using only the unifix cubes and redistributing them or evening them out.

Of course you must be ready to discuss remainders and what they represent. Let's say the last names you were working with looked like this:



Once distributed it might look like this.



Since each of the columns are 6 blocks high and a few extra, the mean is 6 and something.

What do we do with the 3 extra blocks?

Since we have 3 extra blocks and 5 columns our mean is 6 3/5.