

MEAN

Subject

Mathematics

Prepared By

[Instructor Name]

Grade Level

5

Overview

This lesson plan covers teaching content for;

1. Mean

Objectives

Students should be able to;

1. Define mean.
2. Create data set and find the mean.

Activity Starter/Instruction

1. **Mean: Average** - The mean is the sum of all values, divided by the number of values in the data set.
2. Each student will contribute to the class shoe size data, collect data for the entire class, and analyze the data by determining the mean.
3. Demonstrate to students the method for calculating the mean by adding up all the shoe sizes of the sample set and dividing by the number of students in the sample set.
4. Encourage students to find the mean of their sample of five students' shoe sizes that they collected.
5. Allow students to notice that their answers may vary because they collected data from different student.

Teacher Guide

Day 1/ Lesson 1: 15mins

1. Make popcorn (ten pages of random numbers between 20 and 99. Copy one set on yellow paper and a second set on white paper. Then, cut and crumble.)
2. "Pop" a bowl of popcorn for each group of students, and hand them a recording page. The recording page will require the students to grab a few pieces of popcorn from the bowl and find the mean.
3. Student can "pop" a set of data with five numbers. Order them from least to greatest, and work on finding the mean of their data set.

Materials Required

- Popcorn
- Dice or card
- White board
- Marker
- Candies (Gummy bear, M&Ms or skittles)
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Additional Resources

- <https://www.cpalms.org/Public/PreviewResourceLesson?resourceID=435751>
- <https://betterlesson.com/lesson/435751/analyze-this-mode-and-range>
- <https://drive.google.com/file/d/0B4kW6VjinOtgNGRv/view>
- <http://classroommagic.blogspot.com/2012/02/presidents-mode-and-range.html>
- <https://www.teachjunkie.com/math-subject/24-free-mode-and-range-worksheets/>
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Additional Notes

Guided Practice

Day 2/ Lesson 2: 15Mins

1. Pull out the dice or card, and give your students a task like "Choose 5 cards and find the mean". Let a partner check their work. Then switch."
2. Or "Roll 10 dice to make a set of data. Find the mean. Then, re-roll two of the dice and see how that changes the data.
3. Have students complete a number of rounds at each station before moving on.
4. Add a little more fun to the stations by using a set of "fancy" dice, or giant cards.

Guided Practice

Day 4/ Lesson 4: 20mins

1. Provide each student with a package of colorful candy. Gummy bears, M&Ms, or Skittles will work for this activity. Provide commercially sold candy packs or buy large quantities of candy and create your own small packs.
2. In this activity, students work on their own, in pairs, in small groups, in larger groups and, finally, as a whole class to figure mean of collections of candy data. They fill in the data they collect on a worksheet.
3. Use the above data to figure the mean, the average number of pieces of candy of each color. For example, if the data indicates 1 red candy, 2 green candies, 3 orange candies, 7 yellow candies, and 7 purple candies, the mean, or average number of pieces of each color is 4.
4. $1 + 2 + 3 + 7 + 7 = 20$ and 20 (total candies) divided by 5 (different colors) = 4 (the average number of pieces of each color).
5. Then each pairs up with a classmate and adds that classmates data to theirs. Then the two students work together to figure out mean of their combined data.
6. Next, combine two pairs of students to form groups of four. Have each student add the work sheet data for the two new people in their group. They will also work together to find mean of their combined data.

Summary	Assessment Activity	Assessment Activity
1. Ask students randomly to provide solutions and review answer with the whole class.	1. Provide students with the test data for five fictional students. 2. The data shows how many answers each student got correct on a quiz of 10 questions. Instruct students to find mean.	Assess if students can; 1. Define mean 2. Calculate for mean correctly.