Data



TELL ME WHAT YOU MEAN

Purpose

• To use measures of central tendency to compare different averages.

Division – Junior

Equipment

- Basketballs and basketball hoops
- Pencils and paper
- Tape

Set-up

- Use tape to mark at least five different spots on the ground around each basketball hoop. (Or use existing lines.)
- Divide students into small groups and direct them to find an open basketball hoop.
- · Give each group a basketball, a pencil, and paper for recording results.

Activity

- On your signal, students take 10 shots (one at a time) from each spot and record the number of baskets they made.
- Once all students have had a chance to shoot from each of the spots 10 times, students will work together to calculate their individual mean, median, mode, and range across all of the spots (depending on grade level).
- Students then combine their data and calculate a group mean, median, mode, and range across all of the spots (depending on grade level).

Modifications

- Activity can be performed in a smaller activity area using everyday objects for a hoop (e.g., bins, baskets, hula hoops) and a basketball (e.g., bean bags, paper balls).
- Change the throwing distance, throwing object/basket and/or the way the object is sent (e.g., kicking to a target, putting a golf ball, rolling a ball into a hoop).

Questions for Student Understanding

- Which measure of central tendency made your average look the best (mean, median, mode, or range)? Why do you think it did?
- Which measure of central tendency was the most accurate representation of your average? Why?

<u>Note</u>: Repeat the same questions as they relate to the group averages.