Grade 6

PASS: 4.2, 5.2 5.3

Materials: 2 straws per student, meter stick for each pair of students, masking tape

Before beginning:

1. Make a javelin by cutting a 1 cm slit in one end of one of the straws. Insert the other straw into the cut end. Secure this connection with a piece of tape.

2. Tape off a starting line at one end of the room.

3. Pair off students.

Activity:

One of each pair of students will throw his javelin as far as he can. The second student will mark the distance of the farthest point of the thrown javelin with a piece of tape marked with a #1 and the student's initials. The same student will throw four additional times for a total of five trials. Each throw will be marked with a piece of tape identifying the throw number and initials. After five trials, the students trade positions. Partners then measure (in centimeters) the distances of each of the 10 throws and record them in a table. Convert each measurement to decimeters and meters. Add this to the table. Find the median and mode for this data.

When all pairs have finished gathering data, combine the data on a scatter plot that includes the data from each student group. Discuss data trends and outliers.

Follow-up Questions:

What relationship did you find between each column (centimeter, decimeter, and meter) of your lab sheet?

How much did the data vary between the groups?

Did your data include any outliers? What caused the outlier(s)?