## Unit 8 Lesson 11: Comparing Groups

### 1 Notice and Wonder: Comparing Heights (Warm up)

#### Student Task Statement

What do you notice? What do you wonder?



### 2 More Team Heights

#### Student Task Statement

1. How much taller is the volleyball team than the gymnastics team?
	* Gymnastics team’s heights (in inches) : 56, 59, 60, 62, 62, 63, 63, 63, 64, 64, 68, 69
	* Volleyball team’s heights (in inches): 72, 75, 76, 76, 78, 79, 79, 80, 80, 81, 81, 81
2. Make dot plots to compare the heights of the tennis and badminton teams.
	* Tennis team’s heights (in inches): 66, 67, 69, 70, 71, 73, 73, 74, 75, 75, 76
	* Badminton team’s heights (in inches): 62, 62, 65, 66, 68, 71, 73
* What do you notice about your dot plots?
1. Elena says the members of the tennis team were taller than the badminton team. Lin disagrees. Do you agree with either of them? Explain or show your reasoning.

### 3 Family Heights

#### Student Task Statement

Compare the heights of these two families. Explain or show your reasoning.

* The heights (in inches) of Noah’s family members: 28, 39, 41, 52, 63, 66, 71
* The heights (in inches) of Jada’s family members: 49, 60, 68, 70, 71, 73, 77

### 4 Track Length (Optional)

#### Student Task Statement

Here are three dot plots that represent the lengths, in minutes, of songs on different albums.







1. One of these data sets has a mean of 5.57 minutes and another has a mean of 3.91 minutes.
	1. Which dot plot shows each of these data sets?
	2. Calculate the mean for the data set on the other dot plot.
2. One of these data sets has a mean absolute deviation of 0.30 and another has a MAD of 0.44.
	1. Which dot plot shows each of these data sets?
	2. Calculate the MAD for the other data set.
3. Do you think the three groups are very different or not? Be prepared to explain your reasoning.
4. A fourth album has a mean length of 8 minutes with a mean absolute deviation of 1.2. Is this data set very different from each of the others?

#### Activity Synthesis





© CC BY Open Up Resources. Adaptations CC BY IM.