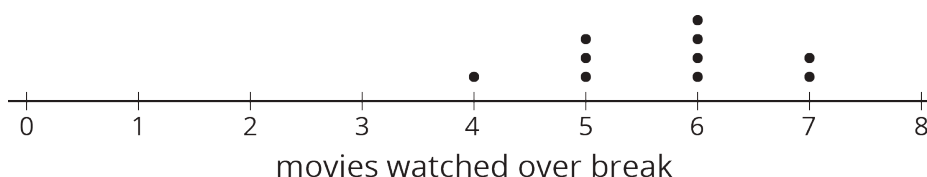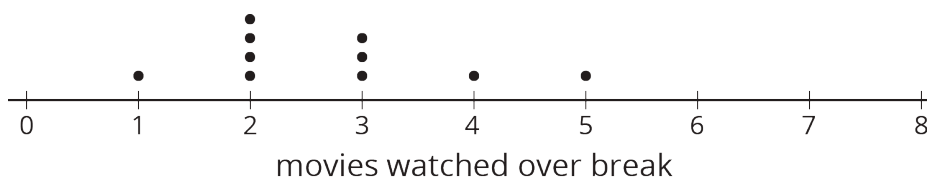# Lesson 18: Comparing Populations Using Samples

Cool Down: Teachers Watching Movies

Noah is interested in comparing the number of movies watched by students and teachers over the winter break. He takes a random sample of 10 students and 10 teachers and makes a dot plot of their responses.

Students:

movies watched over break

Teachers:

movies watched over break

Noah then computes the measures of center and variability for each group:

- Students: Mean = 5.7 movies, MAD = 0.76 movies
- Teachers: Mean = 2.7 movies, MAD = 0.9 movies

1. Is Noah's choice of mean and MAD appropriate for the data he has? Explain your reasoning.

2. Should Noah conclude that there is a meaningful difference in the mean number of movies watched over winter break between the two groups? Explain your reasoning.

Grade 7 Unit 8
Lesson 18

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1