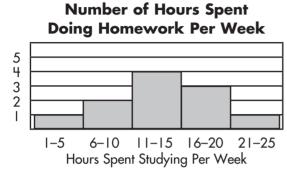
## **Lesson 6.2** Drawing Inferences from Data

Data sets from random samples can be used to make inferences about the data from the population.

Billy is collecting information on how long his classmates spend studying each week. He talks to 11 different students from his class of 29 and collects the information show on the histogram below.

**Number of Students** 



The following information can be determined using this data:

- 4 students spend 11-15 hours each week studying.
- 4 out of 11 is 36.36% of the sample.
- 36.36% of 29 is 10.54.

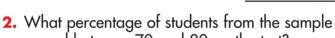
Count

• This means that it is most likely that 10 or 11 students in Billy's class spend 11-15 hours each week studying.

Use the data below to make inferences and answer the questions.

This histogram shows the test scores from a sample of 30 students. There are 125 students in the 7<sup>th</sup> grade.

1. How many students from the sample scored between 70 and 80 on the test?

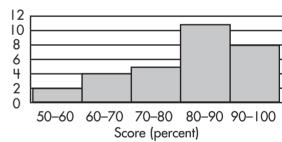


scored between 70 and 80 on the test.

scored between 70 and 80 on the test?

3. Predict how many students in the 7<sup>th</sup> grade





4. What percentage of students from the sample scored between 90 and 100 on the test?

5. Based on the percentage of students from the sample who scored between 90 and 100 on the test, how many students in 7th grade scored between 90 and 100?

6. If there were 150 students in 7<sup>th</sup> grade, how many students would have scored between 60 and 70 on the test?