Key

Math 1

Name _____

7-1 Histograms

Date _____

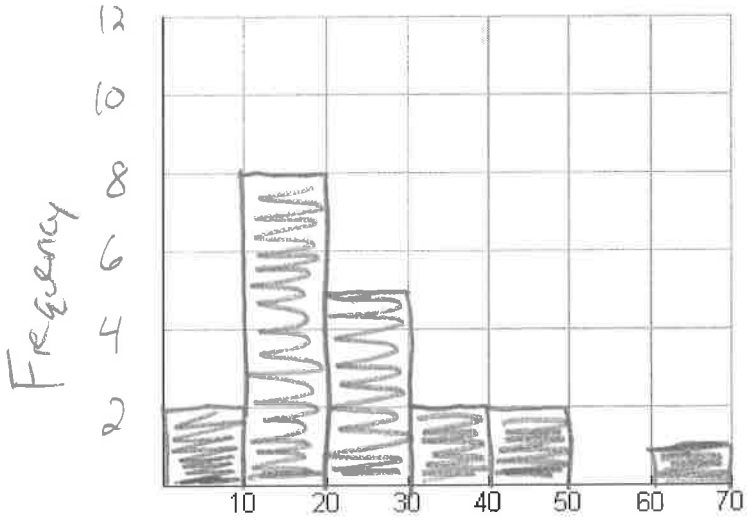
Learning Goals:

- I can describe the center and spread of a distribution.
- I can compare two distributions by examining their shapes, centers and spreads.
- I can interpret the differences in the shape, center, and spread of a data set in the context of a problem.
- I can create a histogram.

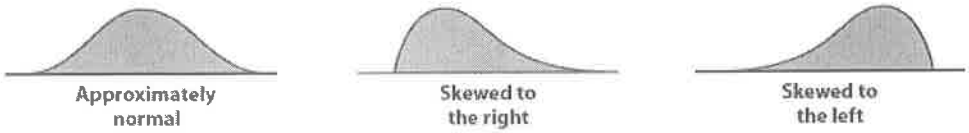
1. **The data below represents the fat content (in grams) of fast food burgers/sandwiches.**

a. Make a histogram of the Fat data. Choose appropriate settings for the *Y* values yourself. Be sure to label the *x*- and *y*-axis appropriately:

Fat (g)	
12	16
13	7
18	22
30	45
22	16
29	28
42	18
39	5
69	13
26	19



NOTES: Look at the notes below on shapes of a histogram.



b. Describe the distribution you created above. Be sure to include the *shape, outliers, center, and spread* (***S.O.C.S.***) *You should have at least 4 sentences*

Shape: Skewed right

Outlier: Possibly the value of 69

Center: 20-30 somewhere

Spread: Range = 69 - 5 = 64

(Range or IQR)

2. Use the following data sets to answer the questions below.

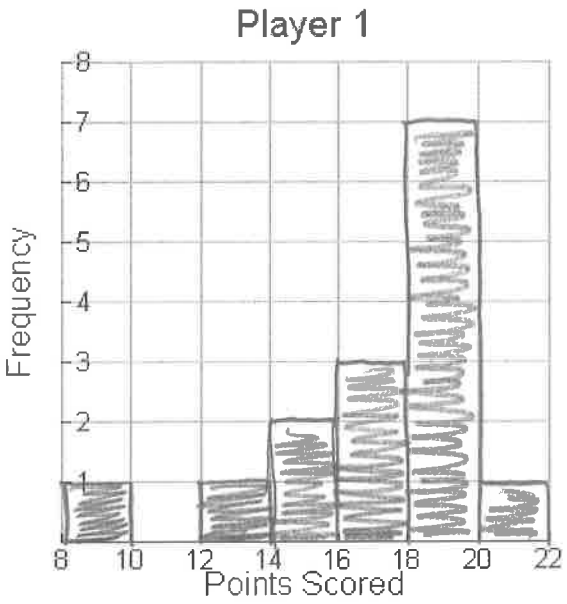
Player 1

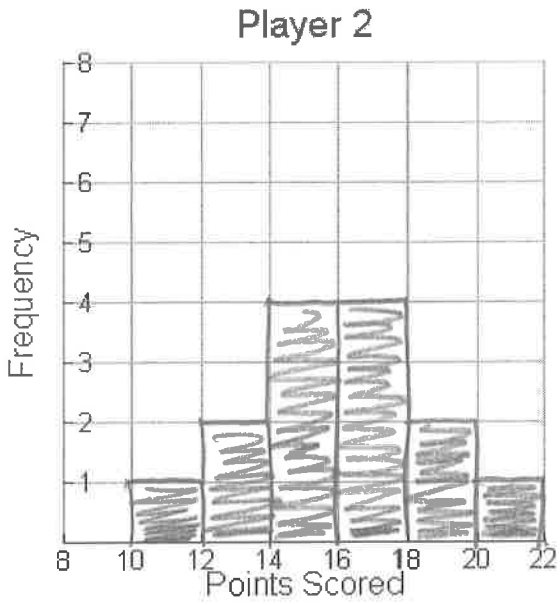
8	19	19	19	19	18	18	18	17	16	16	15	14	13	20

Player 2

11	12	13	14	14	15	15	16	16	17	17	18	19	20

a. Make a histogram for Player 1 and Player 2.





b. Compare the histograms for Player 1 and Player 2. Be sure to mention ***S.O.C.S.*** *You should have at least 4 sentences!*

P1

Shape: Skewed left

Outliers: Maybe 8

Center: About 17

Spread: Range: 20 − 8 = 12

P2

Approx. normal

Probably none

16

Range: 20 − 11 = 9

c. Below is a histogram of points scored by Player 3 in each game of a season. How many games did Player 3 play? Explain.

42 games

Count the heights of the bars.