

# 7.5 Visual Representations

SWBAT draw dot plots, histograms, and box-and-whisker plots.

Assignments:

HW55

# What is Statistics

- ▶ The collection, organization, analysis, and presentation of data
- ▶ Today, we will be looking at three ways of organizing data: dot plots, histograms, and box-and-whisker plots

# Dot Plots

- ▶ Dot plots are similar to a number line - each piece of data is represented as a dot above a number on a number line.

## Goals in a Hockey Game

6	6	5	8	4	6	7	5
4	5	7	4	7	3	2	

# Histograms

- ▶ Histograms look very similar to bar charts.
- ▶ The biggest difference is that with a histogram, the data is collected into groups - you get to decide how big the groups are!

## Hours Slept

6.5	5.5	6.75	6.25	7.75
6.25	7.75	7.75	5.75	5.75
8	7.75	8.25	7.5	7.25

# Box-and-Whisker Plots

1. Put the data in order from smallest to greatest. Put dots above a number line for the smallest value and the greatest.
2. Find the median. This will be the “middle” of your box. (It may not be the exact middle)
3. Find the *lower quartile*. This will be the left end of your box.
4. Find the *upper quartile*. This will be the right end of your box.
5. Above a number line, draw your box. Connect the dots to the box with a line to create your whiskers.

Life Expectancy

Country	Years	Country	Years	Country	Years	Country	Years
Equatorial Guinea	54	Djibouti	61	Macedonia	75	Cuba	79.4
Tunisia	74.6	Guinea-Bissau	50	Kyrgyzstan	69	Croatia	77.5
Slovakia	76.3	Egypt	73.2	Papua New Guinea	67.5	The Gambia	59
Saudi Arabia	74.3	Swaziland	50	Mauritania	59.5		

