

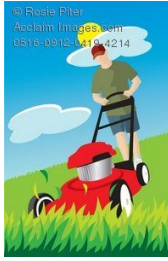
CW# \_\_\_\_\_

Name: \_\_\_\_\_

Math 3 / One-Variable Data / Dotplots

Period: A1 A2 A3 B1 B3

## How many hours a week do you work?



How many hours a week do high school students in California work during the school year? We will use this class as a sample of all students in California.

1. Record the data for the class here.


2. Go to [www.stapplet.com](http://www.stapplet.com). Select "One Quantitative Variable, Single Group." Enter the classroom data and create a dot plot for our classroom data. Copy below.

3. Your teacher used "Census at School" to get a random sample of real data from real students (50 California 9,10,11, and 12<sup>th</sup> graders). Get the link or a copy of the data from your teacher. Find the column for "Paid Work Hours". Highlight the data, then copy and paste it into Stapplet (be careful to only copy the numbers). Create a dot plot for the sample. Copy below.

4. Describe some similarities and differences between the dot plot for our classroom and the dot plot for the census sample.

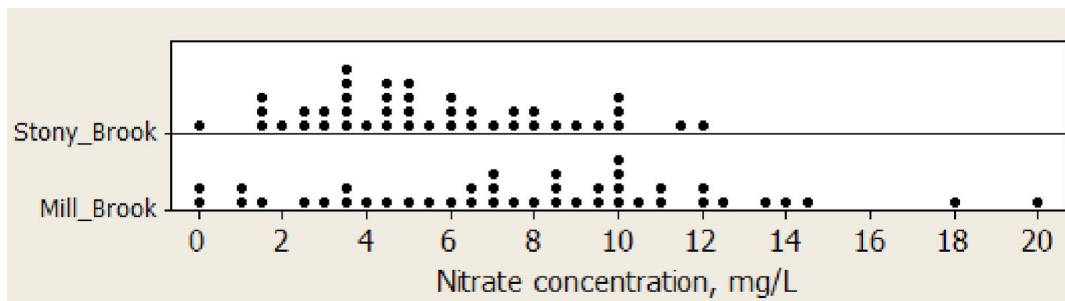
## Displaying Quantitative Data: Dotplots

### Important Ideas:

### Check for Understanding:

#### How can we check the health of a stream?

Nitrates are organic compounds that are a main ingredient in fertilizers. When those fertilizers run off into streams, the nitrates can have a toxic effect on fish. An ecologist studying nitrate pollution in two streams measures nitrate concentrations at 42 places on Stony Brook and 42 places on Mill Brook. The parallel dotplots below display the data.



1. Explain what the dot above 12 in the Stony Brook graph represents.
2. What percent of the nitrate concentration measurements for each stream exceeded 10 mg/L?
3. Compare the centers of these two distributions.
4. Is the variability in nitrate concentrations for the two streams similar or different? Justify your answer.