## Your Data Research - Activity

Name:
Date:

Directions:

1) Find a data set that you are interested in. The links below is easy to use. You can also collect your own data (in the classroom...not elsewhere).
https://www.springboard.com/blog/free-public-data-sets-data-science-project/
2) Find the mean, median, mode, range, $Q_{1}, Q_{3}$, and IQR of your data.
3) Graph your data in a box-and-whisker plot.
4) Summarize your data in a few sentences.

## Example

1) Data set: Looking at the Median Annual Wage

Employment, wages, and projected change in employment by typical entry-level education (Employment in thousands)

| Typical entry-level education | 2016 Employment |  | Employment Change, 2016-26 (percent) | Median annual wage, 2016 ${ }^{(1)}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | $\qquad$ |  |  |
| Total, all occupations | 156,063.8 | 100.0 | 7.4 | \$37,040 |
| Doctoral or professional degree | 4,230.9 | 2.7 | 13.1 | \$102,230 |
| Master's degree | 2,670.6 | 1.7 | 16.7 | \$68,090 |
| Bachelor's degree | 33,372.4 | 21.4 | 10.1 | \$71,550 |
| Associate's degree | 3,617.9 | 2.3 | 11.0 | \$51,270 |
| Postsecondary nondegree award | 9,582.9 | 6.1 | 11.1 | \$36,860 |
| Some college, no degree | 3,858.4 | 2.5 | 4.2 | \$34,520 |
| High school diploma or equivalent | 61,504.1 | 39.4 | 5.1 | \$35,540 |
| No formal educational credential | 37,226.7 | 23.9 | 6.4 | \$22,410 |

2) mean: $\$ 42,713$ median: $\$ 35,540$
$\mathrm{Q}_{1}: \$ 34,520$
$Q_{3}: \$ 68,090$
mode: $\$ 35,540$
range: $\$ 79,820$
IQR: \$33,570
3) 


4) Summary: There is a large range in the data $(\$ 79,820)$, but the data between Q 1 and the median are very similar to each other. The data between the median and the max value vary greatly. Because of the variance in the upper $50 \%$, the median would be more representative than the mean.

