# Text  Oregon Coast Marine Science Educator Alliance logo 2020-21

# Measures of Center: Oregon Rockfish Populations

## Analyzing Measures of Center using ODFW data

**EQ: How can we, as statisticians, apply our measures of center knowledge to recent Oregon rockfish data, in order to analyze the health of the rockfish population?**

**Quickwrite:** How many total rockfish do you think live in the reefs near you? How many species do you think live in your area?

**Notes & Questions:** Provide students with access to the ODFW report previously utilized in this unit of study ([ODFW Informational Report # 2019-10: A video lander of a nearshore rocky reef](https://nrimp.dfw.state.or.us/web%20stores/data%20libraries/files/ODFW/ODFW_41863_2_Information%20Report%202019-10%20A%20video%20lander%20study%20of%20a%20nearshore%20rocky%20reef.pdf)) for analysis. \*Note to teachers: This is a critical reading strategy that helps students analyze their learning. Have students set up their notes into four columns. Depending on your teaching preference, you could have students complete the activity as an “I do, we do, you do,” in collaborative study groups/jigsaw style, or as a full group. Make sure to end with a full class discussion on why the data matters & to answer the EQ.

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| **Data Table** | **Says** | **Means** | **Matters**  |
| ***Look at each table provided in the video lander analysis*** | ***Write down a piece of information from each table.***  | ***Write down what you think this data means.***  | ***Why is this piece of information or data important?***  |
| **Table 3 (Sampling Depths & Video Analysis):** |  |  |  |
| **Table 4 (Substrate Information)** |  |  |  |
| **Table 6 (Fish Species)** |  |  |  |
| **Table 8 (Density Estimates)** |  |  |  |
| **Bonus: Tables 13 (Invertebrates) & 14 (Wildlife)**  |  |  |  |

**Reflection:** What were the results of your data analysis today? How do you think scientists can use math to protect rockfish from overfishing?