

OCEAN CLASSROOM

Oceans of Research

A Sea of Data

EDUCATOR GUIDE

THE
UNIVERSITY
OF RHODE ISLAND
GRADUATE SCHOOL
OF OCEANOGRAPHY

Guiding Questions

“Why is science research important?”

“Why is it important to be able to find and understand data?”

“What can data help us accomplish?”

“How is marine science research and data relevant to us?”

Activity

Time required	50-minute period
Target Audience	Grades 9 through 12

Lesson Objectives

Students will reflect on and discuss:

- what they have learned about oceanography
- what they have learned about data
- why the field of oceanography and data are important
- why this field and data are relevant to them

Suggested Materials

[“A Sea of Data”](#) PowerPoint.

[Slide 19]

1. Once presentations and/or “well, well, well” are complete, gather students for a final discussion about the key topics in the lessons; oceanography, research and data.
2. The following questions can be included in the discussions:
 - a. What did you learn about marine science research?
 - b. Why is it important?
 - c. What did you learn about marine science data?
 - d. Do you feel like you have a better understanding of research and data?
 - e. Why is it important to be able to find and understand data?
 - f. What kind of things can data help us do?
 - g. How do you think this information relates to your life?

Assessment

1. Did students participate in class discussion and demonstrate an understanding of the basics of oceanography?
2. Did students accurately interpret and demonstrate an understanding of different types of data collection methods and the data they produce?
3. Did students accurately graph and interpret their individual data sets?
 - a. For example, the CTD students should show understanding that there is a relationship between salinity, depth/pressure, and temperature.
4. Did students actively participate in group presentations?
5. Did students actively participate in the final class discussion and demonstrate an understanding of oceanography, marine research and the importance of data?