

Name _____ Date _____

Day 1 Worksheet: Modeling the interaction of salinity and diatom populations in the Hudson Estuary:

1. What organisms live in the Hudson River? List as many as you can below.
For each organism, list whether it is a producer, a consumer, or a decomposer.

Organism	Role in food web

2. What are the abiotic factors in the Hudson River ecosystem? List as many as you can think of, along with one way that changing this abiotic factor could affect the ecosystem.

Abiotic Factor	Predicted effect

3. Graph the salinity data for your assigned station and answer the following questions.

Assigned station name: _____

What is the independent variable? _____

What is the dependent variable? _____

Does the salinity at your station change over time? _____

If so, is there a pattern? _____

What do you think might cause this pattern?

4. Walk along the Hudson River map from the mouth of the river going north.

How does the average salinity change as you travel from north to south on the Hudson River?

What causes this change in salinity between stations?

5. Between which two stations is the salt front located?

How did you determine the location of the salt front?

6. Think about the ecosystems on either side of the salt front. How might these ecosystems differ?

