

Name _____

Date _____

Tides in the Hudson

The Hudson River is an estuary from the Troy dam all the way to New York City. This means that it is an area where fresh and salt water mix. How do the tides influence the Hudson River during a 4-day time period? The data was collected by scientists from the Cary Institute in the Hudson River near West Point in August, 1995.

Create a graph using the data on the second page. Answer the questions below.

1. What pattern do you notice?

2. When is the lowest level of salinity? The highest?

3. What could be one reason why the levels change every day?

4. What do you think would happen to the salinity levels if it started to rain?

5. What do you think would happen to the salinity levels if it didn't rain for weeks?

6. If you were on a boat that started in Troy and sailed down the river towards New York City, what do you think would happen to the salinity levels as you move along the river? Explain your answer.

7. If you had data for a whole month, how would you expect the data to change?

Time	Salinity (ppt)
16:00:00	1.83
17:00:00	2.18
18:00:00	2.14
19:00:00	2.52
20:00:00	2.88
21:00:00	2.91
22:00:00	2.9
23:00:00	2.6
00:00:00	2.86
01:00:00	2.44
02:00:00	2.55
03:00:00	2.21
04:00:00	2.16
05:00:00	2.17
06:00:00	2.41
07:00:00	2.38
08:00:00	2.28
09:00:00	2.41
10:00:00	2.52
11:00:00	2.62
12:00:00	2.83
13:00:00	2.84
14:00:00	2.46
15:00:00	2.1
16:00:00	1.79
17:00:00	1.9
18:00:00	2.12
19:00:00	2.19
20:00:00	2.47
21:00:00	3.11
22:00:00	3.33
23:00:00	3
00:00:00	3.12
01:00:00	3.8
02:00:00	3.21
03:00:00	2.9
04:00:00	2.88
05:00:00	2.68
06:00:00	2.5
07:00:00	2.49
08:00:00	2.43
09:00:00	2.45
10:00:00	2.61
11:00:00	2.87
12:00:00	3.22
13:00:00	2.83
14:00:00	2.45
15:00:00	1.99