

## Shipping Data for Day in the Life 2014 - October 16, 2014



		Vessels: Time Seen/Direction of Travel		
		<i>Mobile Pearl</i>	<i>Pretty Lamb</i>	<i>Bouchard barge</i>
River Miles Site	HRM 123/Coxsackie	12:06 PM/north	12:15 PM/south	1:34 PM/north
	HRM 118/City of Hudson	10:32 AM/north	12:53 PM/south	11:16 AM/north
	HRM 102/Saugerties			10:15 AM/north
	HRM 97/Ulster Landing Park	9:15 AM/north		9:41 AM/north

This data can be used to formulate math skills questions such as the following:

1. How many miles did (choose vessel) travel from (choose site) to (choose site)?

For example: How many miles did the *Mobile Pearl* travel from Ulster Landing Park to Coxsackie?

**Answer:  $123 - 97 = 26$  miles**

2. How long did it take (choose vessel) to travel from (choose site) to (choose site)?

For example: How long did it take the *Mobile Pearl* to travel from Ulster Landing Park to Coxsackie?

**Answer:  $12:06 = 11$  hours,  $66$  minutes**

**$9:15 = 9$  hours,  $15$  minutes**

**$2$  hours,  $51$  minutes**

"This activity focuses on unit conversion or dimensional analysis". Hours and minutes are two different units. Students can convert everything to minutes or everything to decimal hours and convert it back

3. Assuming the boat captain traveled at a constant speed, what was the speed of (choose vessel) as it traveled from (choose site) to (choose site)?

Select any vehicle and follow it between two sites. Compute distance, then amount of time and then computer rate.

$$R = D/T$$

4. Which vessel made the trip between Coxsackie and the City of Hudson most quickly? **Pretty Lamb** Why do you think they were able to do this?

(any number of answers might be valid here; different vessel designs (photos can be found online); different engines; maybe different tide conditions - were they going against or with the current? (could refer to sites' DITL data, but might find it confusing)