Name_____ Period _____ Date _____

Ship Tracking

Lesson 3: Large Ships
Large ships are heavy and use a lot of power to move through the water. The large amount of power it needs to move will require loud motors and propellers. This will affect the acoustic signature and be different than the small and medium sized ships. Use your ship tracking abilities and document the acoustic signatures for the large ships.

Doing the Science
1.   Start the Ship Tracking Simulation by clicking on the "Sim" tab.
2.   Click on the green "Learn" button.
3.   Click on "Start" on the left side of the simulation.
4.   Ships will float across the screen. When you see a ship floating by, hover your cursor over the ship to see its acoustic signatures.
5.   Click on the ship to stop its movements and freeze its acoustic signature.
6.   Record the ship's frequency and amplitude in Table 1.
7.   Draw the acoustic signature into the table to create a database of the large ships.
8.   Clicking on "Redo" will reset the ship so that it will sail across again.
9.   Click on "Next" to continue onto the next ship.
10.   Repeat steps 3-9 for the next six ships.

Table 1.

Ship Type	Frequency (Hz)	Amplitude (dB)	Acoustic Signature
135m Tanker			
135m Freighter			
180m Tanker			
220m Container Ship			
270m Container Ship			
270m Supertanker			
340m Supertanker			

Do You Understand?
1. How do the large ship acoustic signatures compare to the small and medium sized ship acoustic signatures? Is there a pattern?