



## Marine Aquarium Set-up



It is important that you follow these instructions EXPLICITLY and not horse around AT ALL during this activity. Setting up a workable marine environment requires precision and care. You will be working with electric pumps and other equipment that can be dangerous when used near water. Please follow all instructions and lab safety rules to the letter!

In your aquarium groups, you should decide on a division of labor to accomplish the following tasks:

### Fourth period:

- 1) CAREFULLY remove the hood from your aquarium. Take special care with the fluorescent lighting attached to the hood (we do not house tropical fish, so we do not use these).
- 2) Remove the Aqua-Clear filter from your tank.
- 3) Obtain a bag of "live sand".
- 4) Distribute the sand CAREFULLY and EVENLY over the bottom of the tank, being extremely vigilant not to crack the tank or spill sand outside the tank.
- 5) Slowly and carefully, add water to your tank. As you do this, add 5 ml. (1 capful) Tap Water Conditioner to each 5 gal. of water so that the water will be de-chlorinated. Mix, then allow the treated water to sit until next class.
- 6) According to the instructions in the owner's manual, set up the Aqua Clear power filter. Be sure to create a "drip loop" as per the instructions so that the plug does NOT get wet. Electricity and water do NOT mix well, so take great care in assembling this.
- 7) DO NOT LOSE OR THROW AWAY ANY PAPERWORK SUCH AS INSTRUCTION MANUALS THAT ARE ASSOCIATED WITH THE EQUIPMENT!! HAND THESE TO MS. ANDREWS WHEN YOU ARE FINISHED WITH THEM!!!
- 8) Replace the hood on your aquarium when you are finished with this process.

Period 5:

- 1) CAREFULLY remove the hood from your aquarium. Take special care with the fluorescent lighting attached to the hood (we do not house tropical fish, so we do not use these).
- 2) Following instructions on the bag (approx.  $\frac{1}{2}$  cup per gallon of water), add "Instant Ocean" synthetic sea salt to your tank. Allow it to dissolve fully. Add a little at a time, checking the salinity as you go... you can add more salt, but you can't take it out!
- 3) Using the hydrometer, check the salinity of your water. It should be around 28—30 ppt.
- 4) Clean filters as needed, now that the excess sediment from the live sand has been cleared by the filters.
- 5) At the end of the period, remove the activated carbon filters and place them in beaker of deionized water.
- 6) Add one ounce of denitrifying bacteria ("Go Juice") to the water.
- 7) Allow this to circulate over the weekend.
- 8) Replace the hood on your aquarium.
- 9) Monday morning, replace the activated carbon filter.
- 10) Make a "species inventory" of which and how many of each organism gets placed in the tank. If any die as the semester goes on, note this on the inventory. That way, none will be left behind when "tank take-down" time comes.

