

## SALTWATER AQUARIA NOTES

1. The tank should not have any metal trim as this is easily corroded by salt water.
2. Tank size should be a minimum of 20 gallons.
3. The airlift tubes channel the flow of air and water from below the filter plant to the surface of the aquarium providing a continuous cycle of water circulation and aeration.
4. A pump capable of producing a consistent, powerful air flow is very important.
5. Describe the three main functions the gravel used in a saltwater aquarium performs.  
First, it acts as a place where beneficial bacteria can grow.  
Secondly, the gravel acts as a buffer for the water in the aquarium, preventing it from becoming too acidic over time.  
Lastly, the gravel traps suspended particles which accumulate in the aquarium.
6. Why is it important to use prepared synthetic sea salts? Because they contain many of the trace elements necessary for normal, healthy growth.
7. Salinity can be easily measured by the use of a standard hydrometer and a thermometer.
8. Is an outside power filter necessary for a salt water aquarium? No
9. Test kits are available for determining oxygen, pH, ammonia, and other forms of nitrogen in the water.
10. What are the optimum pH levels in a salt water aquarium? 8.1 to 8.2
11. Avoid the exotic (and often expensive) machines which make fantastic claims of improved water quality for an aquarium.
12. Why should you never use detergents of any kind to clean either the inside or the outside of the aquarium?  
These mixtures are toxic to marine animals and should be kept away from the tank.
13. Locate the aquarium away from areas of temperature extremes, such as next to a heater or air conditioner. Avoid direct sunlight which can cause temperature change and promote unwanted algal growth.

14. How heavy is water? About 8 pounds per gallon.
15. Why is it important to locate the air pump above the level of the water in the aquarium? This will prevent water siphoning into the pump in the event of a power failure.
16. A liquid dechlorinator can be obtained at a local aquarium supply store. The salinity may depend on where you have collected your animals, but salt water aquariums should have specific gravities between 1.020 and 1.021.
17. The filtration system should be allowed to operate for at least 24 hours before introducing any animals into the tank.
18. The bacteria which provide “biological filtration” of nitrogenous wastes must be given time to populate the gravel in a tank. This process can take up to 6 weeks.
19. One way to speed up this process is to add some gravel from an aquarium which is already established. This “seeding” process will introduce healthy bacteria to the tank’s filter bed.
20. When introducing a new animal to an aquarium, make sure that the temperature and salinity of the water in the tank matches that from which the animal was taken.
21. Overcrowding of the aquarium is the single most common cause of problems for the beginning aquarist!
22. What is the “rule of thumb” for determining the carrying capacity of your tank? One inch for every 2 gallons of water.
23. What can we use to raise the pH of the water if it is too low? Add baking soda
24. What is the most important rule for feeding? Do not over feed
25. Name one rule to help in troubleshooting aquarium problems.  
First, when a problem is noticed in the tank, such as erratic behavior of feeding, a partial water change should be made.  
Second, check all parts of the aquarium system for proper operation. Any changes in temperature, salinity, pH, aeration or other factors should be corrected.  
Third if only one animal is affected, this animal may need to be moved to a separate, smaller tank.