

setting up a freshwater aquarium

Freshwater aquariums start out as simple tanks of water into which aquatic life is placed with the goal of creating the ultimate aquatic environment. A little extra care and patience in the beginning will go a long way toward creating a healthy and problem-free aquarium for years to come.

Location:

Before any work is done with the tank itself, determine the best location for the aquarium. It should be placed away from windows, outside doors, heat vents and air conditioners. Rapid changes in temperature are extremely stressful to fish, and direct sunlight will quickly turn your beautiful tank into a murky green algae farm.

Also, keep in mind that water weighs about 8 pounds per gallon. That means that a 20-gallon aquarium will weigh almost 170 pounds, and a 75-gallon will weigh close to a whopping 630 pounds! Be sure your floor will support this amount of weight.

Some rental agreements limit the size of aquariums allowed. Place your aquarium in a room where you spend large amounts of time. Check for nearby electrical outlets, as most tanks will need at least three, depending on how much equipment the aquarium needs.

Set up the tank:

1. Rinse out the tank to get rid of any dust or debris inside.
2. Set the tank stand into place, making sure it's level and adjust accordingly. If you don't have access to a carpenter's level, place the tank on the stand and fill with one to two inches of water. Check



Developed with and approved by a qualified veterinarian.

to see that the water is an even distance from the top of the stand on all four sides. An unbalanced aquarium can be extremely hazardous. Also, placing a tank on an uneven or tilted surface increases the risk that the tank will crack or leak. Using anything other than a manufactured tank stand may void your tank's warranty.

3. Make sure there is enough space between the wall and the back of the aquarium to adequately fit filters and to allow easy access for maintenance.
4. Affix your background to the tank.
5. Fill the tank approximately $\frac{1}{3}$ full. Carefully dry off the bottom edge of the tank and the stand. Now check for leaks. Look for water beading up on the bottom edge or running down the sides of the stand. If the tank leaks, empty it and return it to the store for a replacement. You can attempt to fix it, but repairing a leaky tank is difficult, with no guarantee of success.

The filter:

Install the filter according to the manufacturer's directions. Do not plug your filter in at this time.

Add substrate:

Rinse the new substrate (a kitchen colander works well, but be sure to disinfect it before using it for food preparation) and décor. Place the substrate and all decorations into the tank.

You can use a commercial bacteria additive or you can use 1 to 2 cupfuls of substrate from an existing aquarium—the existing substrate contains beneficial bacteria.

Install the airstone:

If you want bubbles, now is the time to hook up the airstone or action ornament, air-line tubing, gang valve, check valve and air pump.

Fill the tank:

If no leaks have been noted, fill the tank the rest of the way with water. To protect

the décor and aqua-scaping, place a small saucer or bowl into the tank and pour the water directly onto that. Check the tank for leaks.

Add the appropriate amount of water conditioner or additive to the tank.

The heater:

Place the heater into the tank. **Do not plug it in at this time.** The best place for the heater depends on the type of heater. Clip-on non-submersible heaters that must hang vertically in the tank should be placed as close to the outflow of the filter as possible. Submersible heaters should be placed as close as possible to the inflow of the filter. These placements allow the heated water to be better dispersed throughout the tank. Check the tank for leaks.

Be sure the heater is installed appropriately to avoid overheating.

Wait at least 20 minutes to plug in the heater. This allows the internal thermometer to adjust to the water temperature and assures the heater doesn't overheat. Follow the instructions included with the heater and adjust your tank to the appropriate temperature (usually around 72 to 78°F.)

Thermometer:

Install the thermometer according to the manufacturer's instructions. The thermometer should be on the opposite end of the tank from the heater in a position that is easy to check. Place the hood and light (if applicable) onto the tank. Plug in the filter, light, air pump and heater. Make sure the cords running from the tank touch the ground before looping back up to the plug. This is called a "drip loop" and prevents water from running down the cord into your electrical socket. You may find that the tank's water level drops slightly when the filter starts. Add as much de-chlorinated water as necessary to bring the water level to the correct level.

Stabilizing period:

Phase one of your tank setup is now complete. Wait until the tank has remained stable for at least 24 to 48 hours before adding any fish. This allows the atmospheric gases in the water to dissipate, and allows time for you to adjust the heater. The water may be cloudy. Wait until this cloudiness dissipates before adding fish.

If the water temperature has remained stable for at least 24 to 48 hours and the white cloudiness has cleared up, you are now ready to begin the cycling process of your new tank. There are additives that will speed up the nitrogen cycle. Please refer to the Nitrogen Cycle Care Sheet for your next steps.

Resources:

Books and websites that include information on common fish diseases and how to treat them.

Petco Care Sheet on Nitrogen Cycling

Petco Care Sheet on Water Quality

Aquatic Success Kit, available for download on **petco.com**