



TROUT IN THE
CLASSROOM

Tank Set

Basic

A great series of five videos from a teacher in Maryland. These videos cover new equipment that many schools are using now. Watch a video showing tank setup. Mac users may prefer [this link](#). Please [contact us](#) for more details or to order, visit our partners, [That Fish Place](#).

Tank Setup



1. Unpack all materials and compare to shipping lists. Ensure that nothing is missing or broken. Check plastic pieces for cracks, particularly the filter components.



2. Place tank in a location away from heat, excessive light, and activity. If next to a window, make sure that the window shade is down until the fry are swimming around, or that there is some protection around the tank. Do not put the tank next to an active radiator. Because a filled tank will be top heavy, place it away from areas where students might accidentally bump into it. Clean out any dirt inside the tank with a wet paper towel. Do not use soap or any cleaning chemicals--the residue from these compounds can persist in the aquarium and harm your trout.

3. Locate the electrical outlet and plug in the power strip. This should be close enough to the tank that all electric devices can reach. Ideally, this should be right behind or underneath the tank. Turn the power strip off.



4. Place the chiller to the side of or below the tank with the front facing out.

Please ensure that there are at least 4 inches on every side for airflow. For a flow-through chiller, open the plastic bag with chiller parts and remove two water nozzles. Screw these in place on the chiller, tighten them by hand. You may carefully tighten these further with pliers, but be mindful of the limitations of the plastic.

5. Measure a length of chiller tubing that will reach from the chiller to the bottom of the tank without stress or kinks, be generous with length because a tube can always be made shorter but not longer. Cut this length of tubing and slide one end over the chiller input nozzle. Measure a similar length of tubing for the output nozzle of the chiller and cut this piece. Attach this piece of tubing by sliding it over the chiller output nozzle. Tight tubing can be made more flexible by dipping it in very hot water. You may need to remove the nozzle, also. Depending on chiller design, there may not be any specific input or output side.

6. Next slide the metal clamp over the tube to the nozzle on the chiller. Screw the clamp in place over the end of the tube so that the outer edge of the clamp and the tube are matched. The clamp should be tight but not forced.



7. Remove the pump from its box and locate the plastic adapter nozzle for the pump. Screw this nozzle in place, and slide the other end of the input chiller tube over the nozzle on the pump. This connection does not need a clamp. Install the pump filter if one is included but not attached. Gently place the pump inside the tank, place the pump power cord near the power strip.

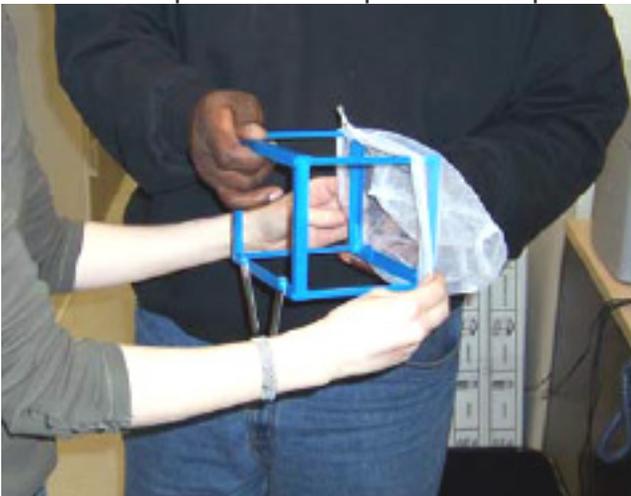
8. Rinse your pea-size gravel two or three times to remove all dust. Then layer it 1"-2" thick on the bottom of the aquarium. You can cover just part of

the bottom, if you prefer to keep the gravel away from the pump and airstone.



9. Unpack and assemble the filter according to the included directions. If it is a hanging filter, place it on the back side of the tank. Make sure that the filter intake tube is as close to the tank bottom as possible. Cover the intake for your filter with some sort of mesh or net, that will keep the fry from getting sucked into your filter (plastic net bags and pantyhose are popular materials for this). Secure the mesh with an aquarium-safe method, such as a rubber band. Canister filters can be placed next to or underneath the tank, and they can be hooked in-line with a flow-through chiller. Place the filter power cord near the power strip.

10. Unpack the airstone, air pump, and airstone tube. Attach one end of the airstone tube to the airstone, and the other to the air pump. Place the air pump on the ground near the power strip. The rubber feet of the air pump should be on the ground to prevent excessive noise. Place the airstone in the tank, away from the filter intake tube. You may chose to use a check valve to prevent backflow of water in the airstone tube. To do this, make a cut in the air tubing and use the check valve to connect the two pieces back together. Air should push the flap and compress the spring inside the valve.





11. Assemble the hatching basket by stretching the net over the outside of the plastic frame, or carefully securing the net to the inside of the frame. Hang the basket on the tank wall by bending the metal clips. If you use a vibert box instead, it will be placed on the floor of your tank.

12. Fill the tank with tap water using any clean container or tubing. The water level should be no more than 2 inches from the top of the tank, but should not be so close that it might spill. Use a cup to fill the filter chamber with water until it overflows back into the tank.



13. Plug in all electric cords using the power strip, but keep the power off. Once everything is plugged in, stand back from the tank to double check all connections and ensure that everything is ready for operation. The output tube should be secure; a student can hold this tube in place. Have some paper towels on hand in the event of a leak.

14. Turn on the power strip and check for any leaks on the chiller. The bubbler should be creating a large volume of small bubbles. The chiller may beep, and is now warming up. Remove the output hose from the water carefully to ensure that there is good water flow. The filter should become much quieter

after all the air is pushed out of the system.

15. Adjust the chiller temperature to the appropriate setting. You may have to wait a few minutes before the chiller begins to operate fully. You will probably hear the chiller fan or compressor operating in a few minutes.

16. You will need to allow any chlorine in your tap water to dissipate for the next 48 hours. Then, follow the bottle directions to add Stress Zyme to the tank at that time. Also note that it is helpful to keep the chiller temperature around 65 degrees during this time, as the warmer temperatures promote bacterial growth.

18. After all this setup, prepare for your trout eggs at least 24 hours in advance by turning the chiller temperature down to 50 degrees.

19. Now it is important to trout-proof your tank, by protecting your small fingerlings from the strong force of the water intakes for your filter and chiller. One method of covering the intakes is detailed in [this PowerPoint slide show](#).

20. Insulation is CRUCIAL to maintaining a stable environment for your trout and minimizing wear on your chiller. Below you can see an image of a well-insulated tank that even has a special viewing window, so that students can see the developing trout. Many different materials can be used to insulate a tank; this one uses foam board.

[For further instruction, watch a video showing tank setup.](#)



Fluval Filter Setup

Videos:

<https://www.youtube.com/watch?v=PTt7ZACZTaM>

<https://www.youtube.com/watch?v=x7r8drhFDUY>

<http://www.fluvalaquatics.com/ca/faq/> (Fluval website)