

GrowLite Construction



Before You Start

This PVC-based GrowLite kit is easy to build, assemble, and transport. If properly constructed and assembled, the frame will be sturdy and structurally sound. Therefore, it is important that these instructions are closely followed, not only for safety, but also for maximizing the potential of your indoor garden.

Construction Materials

- 3 - 10', schedule 400, $\frac{3}{4}$ " PVC pipe
- 8 - $\frac{3}{4}$ " PVC slip tees
- 8 - $\frac{3}{4}$ " PVC slip elbows
- 2 - 1" metal S hooks
- 2 - $\frac{1}{4}$ " x 2 $\frac{5}{8}$ " eyebolts
- 2 - 2" #3 double loop chain lengths
- 1 - 48" florescent shop light (2 lamp, 40 watt)
- 2 - 48" cool white florescent bulb (40 watt)
- 1 - Small container of PVC glue (optional)

Other Materials

- Light timer
- Extension cord
- Bottom plant trays (not perforated)
- Top plant trays (perforated)

Building Instructions

1. Cut the pipe to the correct dimensions:

- Cut two 49" pieces and two 7" pieces from one 10' length of pipe.
- Cut four 24" pieces and two 7" from another 10' length.
- Cut two 43½" pieces and eight 1¼" from the remaining 10' pipe.

The longest cut pieces are ready to be put to use as the bottom, top and side frame of your light. The shorter pieces, however, still require further steps.

2. Insert 1¼" pipe piece into one side of a tee fitting.

- The pipe should slide about ½" into the joint and fit snugly.



- Repeat the procedure with the remaining tee joints and 1¼" pieces.

Optional Step: Apply PVC glue to one side of the 1¼" pipes before inserting them into tees. This will reduce your chances of losing these small parts and will make the final assembly steps easier.

3. Using a hacksaw or bolt cutters, remove about a quarter section from the eyebolt, opening it up enough to allow a chain to hook to it.

- On two of the 7" pipe sections, drill a ¼" hole at the middle of the length of the pipes that passes all the way through the center of each pipe.
- Using the nuts, secure the eye bolts into place as shown.



4. Insert S hooks into the holes that should already be located on the top surface of the shop light.

- Use pliers to slightly bend the S hook in place, so that it will not slip or drop the light if bumped.
- Attach the chain to the other side of the S hook and again secure the hook using pliers so that the chain will not slip out of the hook.



GrowLite Assembly Instructions

Parts: 2 - 49" pieces



2 - 43 1/2" pieces



4 - 24" pieces



2 - 7" pieces



2 - 7" pieces with hooks



8 - tee fittings with 1/4" pieces inserted



8 - elbow fittings



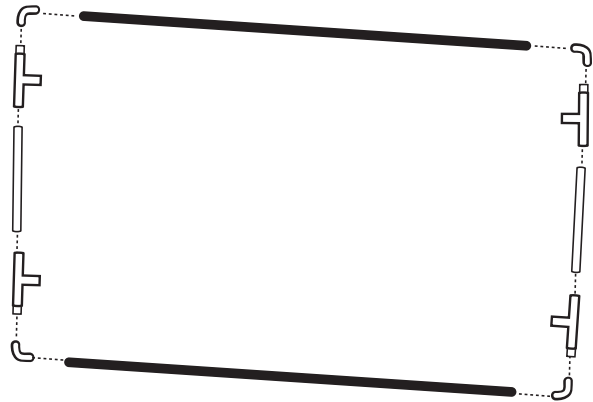
Before You Start

Make sure you have all of the parts shown here, plus the other materials listed on the first page of this packet.

1. Assemble the base

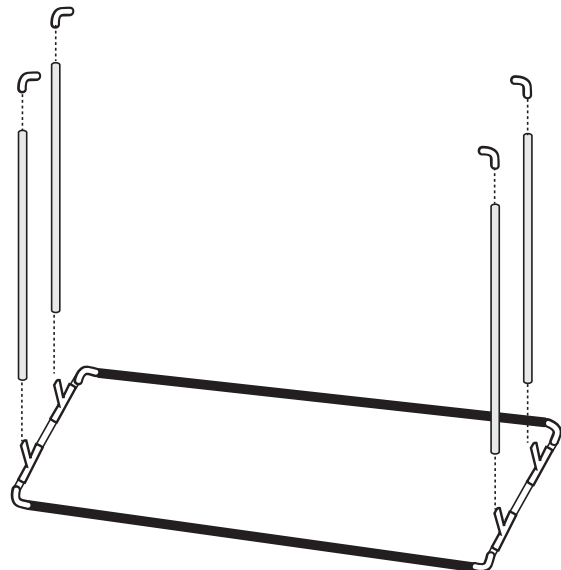
- Fit the base pieces together according to the diagram. The tees should have a short pipe inserted in one side; insert this pipe into the elbow joint.

Note: The longest pieces are used for the base.



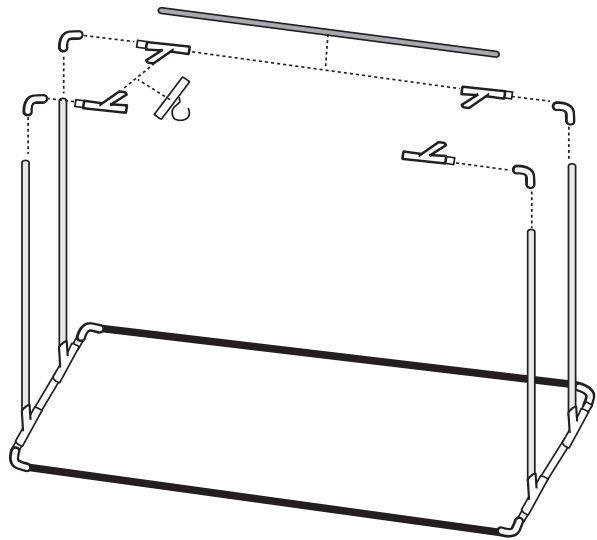
2. Add sides

- Place the four 24" length pipes into the tees, then place elbows on top.



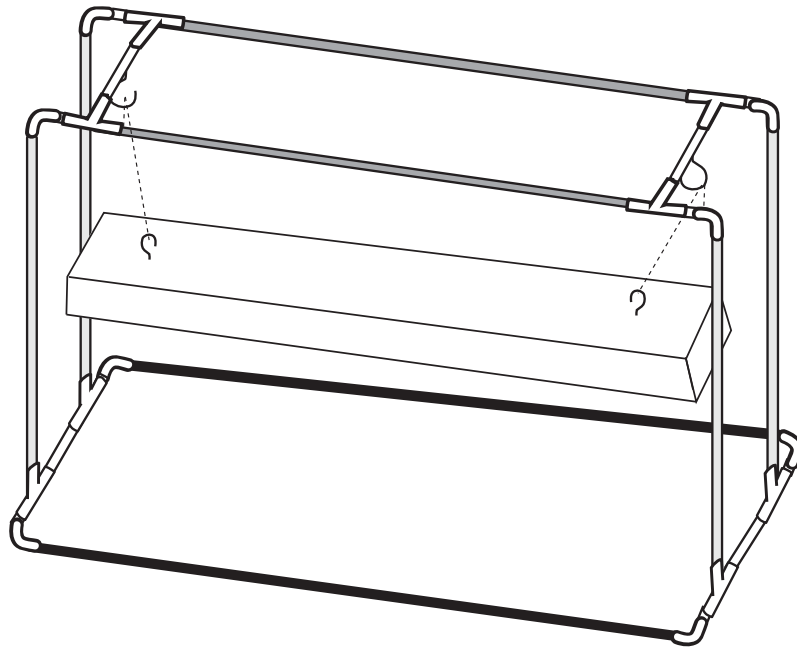
3. Finish frame

- Place remaining tees into the elbows, then place short pipe lengths—hooks down—into the tees.
- Use the remaining pipes to complete the sides.



4. Set up the light

- Link the chain from the light fixture over the hooks. Keep the light adjusted within one to two inches from the tops of the plants.



Congratulations!

Your GrowLite is complete. Enjoy your classroom gardening experience.