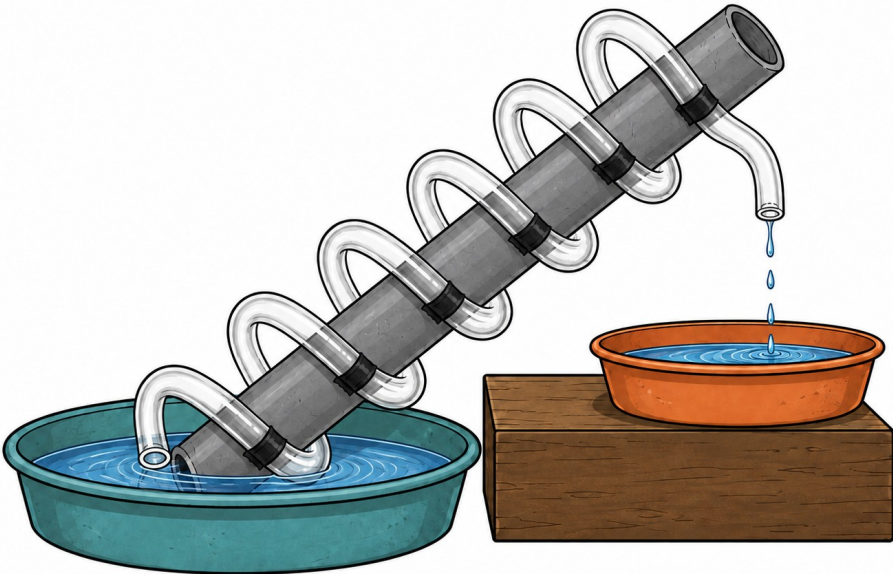


ILLUSTRATED STEPS / SAVE IT. FIND IT. BUILD IT.

WATER PUMP

Your hand supplies the power. A clear spiral carries water to a higher tub.



START HERE

01

GET READY

Tools + clickable build map

02

FOLLOW THE STEPS

One clearly numbered stage at a time

03

FIND IT AGAIN

Quick reference + PDF bookmarks

Build a small demonstration pump, then follow its water pockets as you turn. This moves water; it does not clean it. Every guide is free. Website support is optional.

NUKE ON TIKTOK

MORE FREE BUILD GUIDES

SOURCES / Science Buddies: tubing-screw activity · US Naval Undersea Museum: water lift

BUILD MAP

NEXT

YOUR BUILD MAP

Tap a step to jump there. The printed page numbers work offline too.

HAVE THESE READY

- Rigid pipe: about 60 cm long; at least 25 mm outside diameter
- Clear tubing: 3 m stock; at least 6 mm inside diameter
- Waterproof tape; marker
- Scissors; adult cutting help
- Two wide tubs; clean water
- Low solid support; towels

READ IN ORDER

PREP	Choose flexible, open tubing	03
01	Wrap and secure the tubing	04
02	Make a low, stable lift	05
03	Set the intake at the waterline	06
04	Collect water at the top	07
NOTE	Follow the missing water	08
NOTE	A water mover, not a purifier	09

QUICK REFERENCE / PAGE 10

BEFORE YOU START

Small hand-powered demonstration. Keep both tubing ends open. The inlet must enter water and air each turn. This moves water; it does not purify it.

KEEP THIS COPY

Save the PDF with its guide ID. Use the build map, bookmarks, or your PDF reader's search to find a step later. Video and source links need internet; the instructions do not.

SETUP

Choose flexible, open tubing

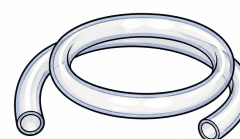
READ BEFORE STEP 01

PREP

Use a spill-tolerant surface and clean demonstration water, away from electrical equipment.



RIGID PIPE



CLEAR TUBING



WATERPROOF TAPE



TWO TUBS

A STARTING SHOPPING SIZE

- **Set out a rigid pipe about 60 cm (2 feet) long and at least 25 mm (1 inch) in outside diameter.**
- Start with 3 m (10 feet) of clear flexible tubing, at least 6 mm (1/4 inch) inside diameter.
- Buy flexible tubing that bends around your pipe without flattening; trim excess after trial wrapping.

PREPARE BEFORE WRAPPING

- **Have waterproof tape, a marker, suitable scissors, two wide tubs, a low solid support and towels ready.**
- Ask an adult to help cut tubing; obtain the rigid pipe already cut with smooth ends.
- The pipe is a support: water travels inside the clear tubing, not through the pipe.

SOURCES / Science Buddies: tubing-screw activity · Science Buddies: pump experiment

BUILD MAP

PREVIOUS

NEXT

STEP

Wrap and secure the tubing

1 OF 4 / READ IN ORDER

01

Even turns should hold their shape when you rotate the whole assembly.



TRIAL FIT, THEN TRIM

- **Tape the tubing near one pipe end and wind it evenly along the pipe.**
- Leave each open tip projecting slightly beyond its pipe end.
- Mark surplus tubing, unwind it for a safe cut, then rewrap to the same spacing.

KEEP THE WATER PATH OPEN

- **Add tape along the winding so the turns cannot slip.**
- Press tape onto the pipe without flattening the tube.
- Look through both open ends; neither should be plugged, taped shut or kinked.
- No glue, valves or end caps are needed.

SOURCES / US Naval Undersea Museum: water lift · Science Buddies: pump experiment

[BUILD MAP](#)[PREVIOUS](#)[NEXT](#)

STEP

Make a low, stable lift

2 OF 4 / READ IN ORDER

02

Begin with a small height difference. A taller stack is not a stronger pump.



PLACE THE RECEIVER

- Put the empty tub on a broad, solid support near the lower tub.
- Fill the lower tub with clean water.
- Keep both tubs easy to reach and stable against sideways movement.

CHECK THE REACH

- Hold the assembly diagonally between them, with the upper tubing tip over the receiving tub.
- Adjust tub spacing so you can keep that outlet inside the rim throughout a full turn.
- Lower the support if this requires a steep angle or an awkward grip.

SOURCES / US Naval Undersea Museum: water lift · Science Buddies: pump experiment

BUILD MAP

PREVIOUS

NEXT

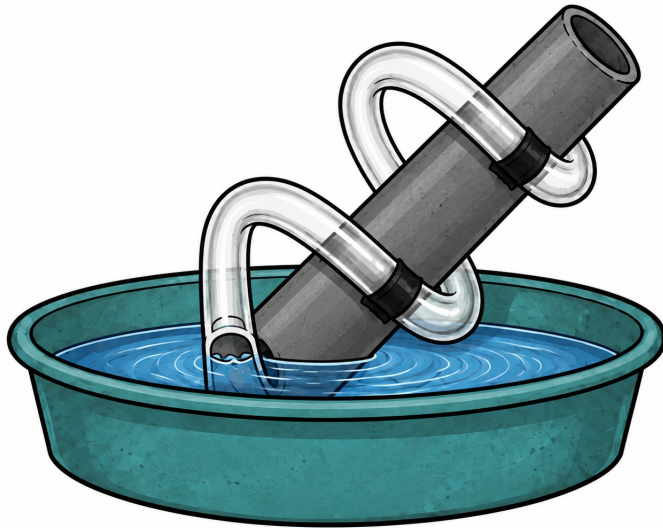
STEP

Set the intake at the waterline

3 OF 4 / READ IN ORDER

03

The lower opening must cross the surface on every revolution.



INTAKE IN WATER



INTAKE IN AIR

WATCH ONE COMPLETE TURN

- **Adjust the lower pipe end so the tubing tip dips into water, then rises into air as you turn.**
- If the tip stays submerged, lift it or reduce the water depth.
- If it never dips, lower it or add water.

FIND THE WORKING DIRECTION

- **Rotate slowly while watching the first clear turns.**
- You should see separate water pockets enter with air between them.
- If no pockets advance after several turns, reverse rotation.
- The winding direction determines which way works.

SOURCES / Science Buddies: tubing-screw activity · US Naval Undersea Museum: water lift

BUILD MAP

PREVIOUS

NEXT

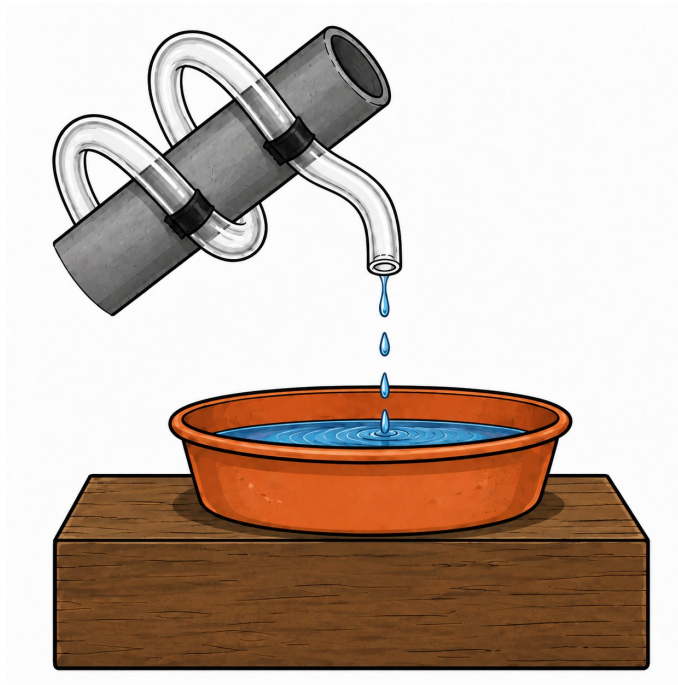
STEP

Collect water at the top

4 OF 4 / READ IN ORDER

04

Keep the outlet over the tub while the pockets travel along the coil.



TURN STEADILY

- **Hold the same modest slope and continue rotating until water leaves the upper tip.**
- Keep your grip light enough not to pinch the tubing.
- Check the intake again as the lower water level falls.

CONFIRM THE RESULT

- **Success is water actually collecting in the raised tub, not just entering the first loop.**
- Pause before the receiving tub overflows.
- Your effort supplies the energy; this setup promises no particular lift height or delivery rate.

SOURCES / Science Buddies: tubing-screw activity · US Naval Undersea Museum: water lift

BUILD MAP

PREVIOUS

NEXT

NOTE

Follow the missing water

KEEP THESE LIMITS WITH THE STEPS

REF

Stop and change one thing at a time, then watch another few rotations.



TRY THE OTHER DIRECTION



REDUCE THE SLOPE

NOTHING ENTERS, OR WATER RETREATS

- **No intake:** check that the open tip crosses the surface and reverse the turning direction.
- Pockets slide back: reduce the slope by lowering the upper tub and repositioning the lower end.
- Recheck the waterline after moving either tub.

FLOW STARTS, THEN STALLS

- **Look for a kink, crushed tape point, loose winding or an inlet now above the falling water level.**
- Slow down and restore the last position that worked.
- Water spilling outside the receiver means the outlet needs realignment, not faster turning.

SOURCES / Science Buddies: tubing-screw activity · Science Buddies: pump experiment

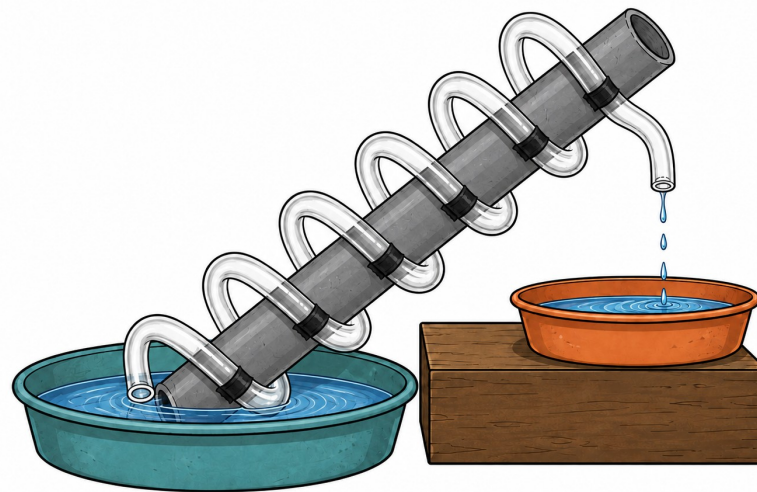
NOTE

A water mover, not a purifier

KEEP THESE LIMITS WITH THE STEPS

REF

Keep this distinction with the build whenever you share or reuse it.



KNOW WHAT YOU MADE

- **This demonstration uses a rotating helix of tubing.**
- A conventional screw pump instead has a helical blade and surrounding channel.
- They are related water-lifting ideas, not identical hardware.
- This build is not a deep-well pump or a tested irrigation system.

PUT THE KIT AWAY

- **Drain the demonstration water into a tub, wipe spills and let the open tubing drain and dry before storage.**
- Inspect tape and tubing before reuse.
- Do not drink the collected water.
- For water treatment, consult the separate free guide linked below; this device provides none.

SOURCES / Science Buddies: pump experiment · Nuke: free water-treatment guide

BUILD MAP

PREVIOUS

NEXT

QUICK REFERENCE

Read the full steps first. Tap any row to return to its instructions.

BEFORE STEP 01

Small hand-powered demonstration. Keep both tubing ends open. The inlet must enter water and air each turn. This moves water; it does not purify it.

01	Wrap and secure Even spiral; short open tips. Tape must not flatten the tube.	P04
02	Set up the tubs Low stable support. Upper outlet stays over the receiving tub.	P05
03	Scoop water and air Intake crosses the waterline each turn. Reverse if pockets do not advance.	P06
04	Turn and collect Keep a modest slope. Water must exit above; lower the angle if it slides back.	P07

NUKE SAYS

The water moved upstairs. Its germs did not receive an eviction notice.