

TIPPY TAP

Environment & Outdoors



THE ADVENTURE:

Build a hands-free wash station for your next camping trip using recycled materials and a tree.

SAFETY TIP:

- How can you safely test the tippy tap to hold the required weight?
- What safety practices should you keep in mind when using any required tools?
- What materials can you use for valves and tubing that are safe for drinking water?

PLAN:

- Where will you set up your tippy tap at your campsite? Is it visible?
- Will you do this adventure inside, outside or at camp?
- What materials will you use to build your tippy tap? The stand?
- Form groups of two or three Venturer Scouts.



DO:

- Collect all of the materials you will need.
- Take a look at your materials. How you can build a water faucet that does not require any electricity or running water. Can you make it hands-free?
- Brainstorm and draw a few designs in your group.
- When you think you have a good design, it's time to start building.
- The nail or plastic may need to be warmed slightly in order to punch any holes. You can use a lighter or matches to warm the nail.
- Your tippy tap should only pour water when it is tilted forward.
- How can you further automate your system? Create a system to fill your tippy tap using a bucket, valves and tubing.
- Test and revise your design until you have a working model.
- Compare the models your Company has come up with. How would you determine which model works best?

REVIEW:

- What do you know now that you did not know before?
- Would this be a useful device in your daily lives? What about for someone living in a community without access to running water? Why or why not?
- How would this device affect your environmental footprint?
- What elements of STEM did you use today? Science? Technology? Engineering? Mathematics?
- What did you like about this adventure? What did you not like about this adventure?
- How would you do this adventure differently?



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MATERIALS

- Plastic jug (approximately 5L)
- Nail
- String or rope
- Tree branch
- Long branches or pieces of wood to build a frame
- Large bucket
- Vinyl or PVC tubing
- Valves
- Materials to build a stand for the bucket
- Drill to make holes in the bucket
- Water



ONLINE RESOURCES:

- [An in-depth lesson plan around a tippy tap](#)
- [Another way to build a tippy tap](#)