How To Instructions: Cartesian Diver

Materials: Cartesian divers can be made with a wide variety of materials. Here are a few examples.

- A large cup of water
- Plastic bottle with cap, 16 ounces or larger
- Scissors
- Bendy straw
- Paperclips
- Fasteners (string, wire, rubber bands, etc) optional





Procedure:

1. Cut your straw so that you have a U shaped piece approximately 1 to 1 ½ inches long.



4. Test your diver in the cup of water to make sure it floats.



- 2. Use a paperclip to hold the two ends together (see photo).
- 3. Add additional paperclips to make sure the diver floats vertically with the bend of the straw at the top. (There are four paperclips on this diver. One holding the two ends together, one on each end of the straw, and one hanging from the other paperclips.)



5. Fill your bottle to the top with room temperature water. Place your diver inside and screw the cap on the bottle. Squeeze and watch your diver sink to the bottom. When you let go, it should float back to the top.

