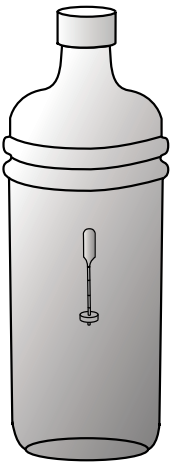


CARTESIAN DIVERS

1. Fill a plastic bottle with water.
2. To make a diver wrap a piece of plasticine around a short piece of straw with the top folded and sellotaped down, or around a dropping pipette.
3. Try to get your diver to float at the surface of a bowl of water.



4. Add extra plasticine or change the length of the straw to complete this step.
5. You will now have a bubble of air trapped inside your diver. Transfer the diver into a bottle of water.
6. Fill the bottle to the top with water.
7. Squeeze the plastic bottle and watch what happens.

IDEAS TO INVESTIGATE

- What do you think would happen if you made a larger cartesian diver?
- What happens if you place the diver in a smaller or larger bottle of water?
- Can you make the diver float in one position?
- What happens if you replace the water in the bottle with salty water? Does the diver float in the same way?
- Find out about the 'swim bladder' of a fish and try to explain how it keeps a fish afloat.