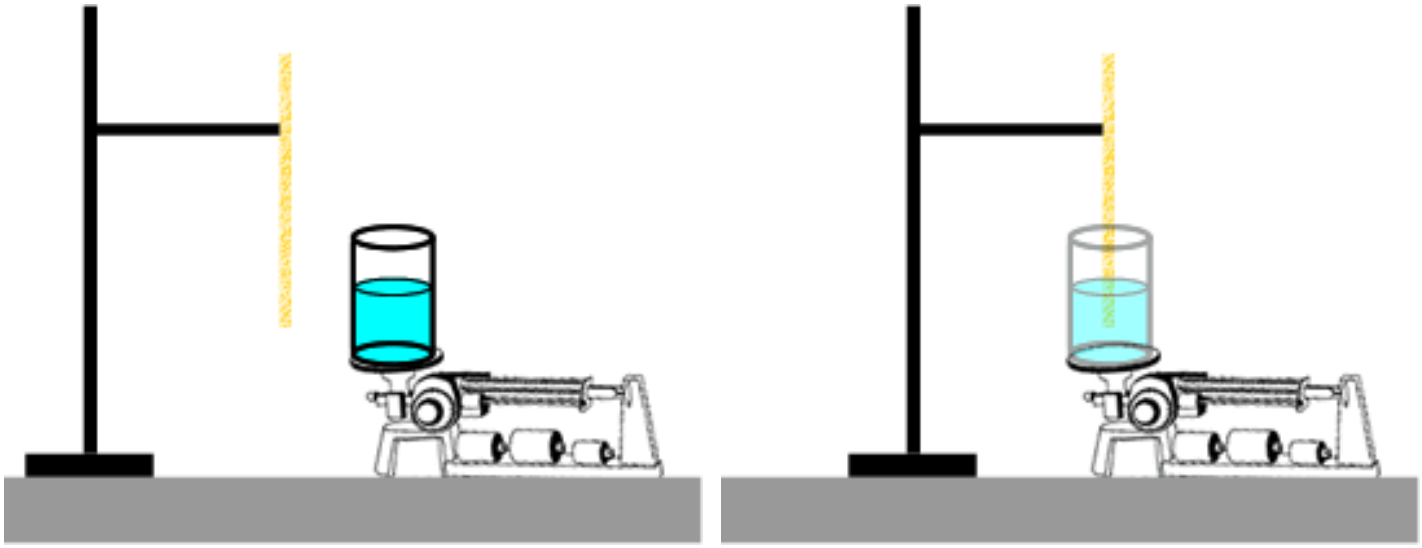
Part A



Above, the figure to the left shows a beaker of water on the pan of a balance. The balance is adjusted so that it reads the mass of the beaker and the water. To the left of the balance is a stand holding a piece of wooden dowel.

The figure to the right shows the dowel in the water. The dowel touches only the water, not the sides or bottom of the beaker.

When the dowel is in the water, does the pan supporting the beaker stay stationary, as shown in the figure, or does it move up or move down?

1. It stays stationary.
2. It moves up.
3. It moves down

Part B

Say instead of a wooden dowel, the stand is holding a steel rod. When it is placed in the water, what happens to the pan of the balance?

1. It stays stationary.
2. It moves up.
3. It moves down.