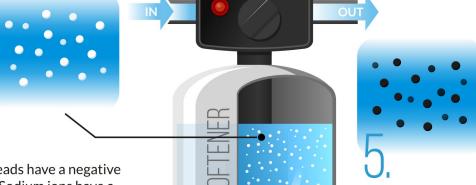
## HOW A WATER SOFTENER WORKS

Water enters the water softener with dissolved minerals such as Calcium and Magnesium.

Both Calcium and Magnesium have a positive charge.





Resin beads have a negative charge. Sodium ions have a small positive charge.

Since positive charges attract negative charges, the Sodium ions stick to the resin beads.

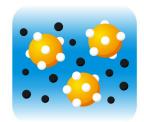
Magnesium are gone. The Sodium ions are in their place in the output water.

The Calcium and

The higher positive charge of the Calcium and Magnesium kicks the Sodium off of the resin beads.

The Calcium and Magnesium are now stuck on the resin beads.





The Sodium ions are now floating in the water and the Calcium and Magnesium are stuck to the resin beads.

The water is now softened because the minerals (Calcium and Magnesium) have been removed from the water.