



Properties of Water

STEAM KIDS #1

What is Water?



What is Water?



Properties of Water

- The First Property of Water
- *Water is an excellent solvent!*
- That means that lots of other materials dissolve in water.
- When water dissolves something, it is basically to breaking it up into little pieces and spreading it around. Like salt in salt water or sugar in your blood!

Properties of Water

- The Second Property of Water
- Water is an insulator
- This means that it takes a lot of time and energy to change the temperature of water. Have you ever boiled a pot of water and noticed that even though the pot was hot, the water was still cool?
- That means that huge bodies of water can easily stay at just the right temperature for all the things that live in them.

Properties of Water

- The Third Property of Water
- Water is denser as a liquid than as a solid. When water freezes, the molecules of water move a little bit away from each other. So, ice expands! If you've ever frozen a bottle of water and noticed that the plastic had popped outward, that's why.
- Why is that important?
- Ice floats in water! So, in the winter only the top layer of a body of water freezes. If the ice sank, then more and more water would keep freezing over time.

Ice in Water &
Ice in Oil



Properties of Water

- The Fourth and Fifth Properties of Water
- **Adhesion:** Water sticks to stuff! Almost anything you dunk under water gets wet, right? Things can get wet because water sticks to their surface.
- **Cohesion:** Water sticks to itself! Have you ever seen two drops of water run into each other and turn into one big drop? Or have you noticed that you can fill a glass with water, even a little over the rim? That's because water is cohesive; water always wants to stay to the water next to it. It wants to stick to itself so much that it can even defy gravity a little bit.

The Magical Leak Proof Bag



Stations

- How Do Penguins Stay Dry?
- How Many Drops of Water Can You Fit on a Penny?
- Ocean Waves: Water Solvent Art
- Coloring!