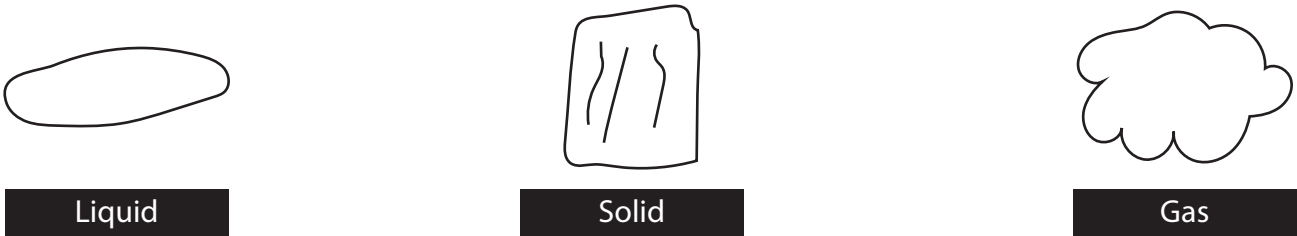


1. Water is unique in that it is the only natural substance that is found in all three physical states at the temperatures normally found on Earth.



2. Water freezes at 32° Fahrenheit (F) and boils at 212°F (at sea level, but 186.4° at 14,000 feet).



3. Water is unusual in that the solid form, ice, is less dense than the liquid form, which is why ice floats.



4. Water is called the "universal solvent" because it dissolves more substances than any other liquid. This means that wherever water goes, either through the ground or through our bodies, it takes along valuable chemicals, minerals, and nutrients.

5. Pure water has a neutral pH of 7, which is neither acidic (less than 7) nor basic (greater than 7).



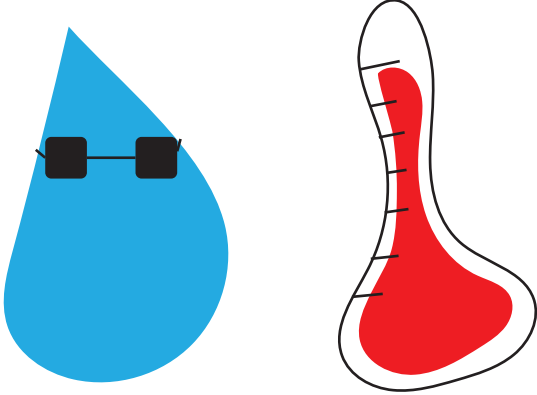
6. The water molecule is highly cohesive and adhesive — it is very sticky. Cohesive, meaning water molecules stick to each other. Water is the most cohesive among the non-metallic liquids. While adhesive means water molecules tend to stick to molecules of other substances.



8. Pure water, which you won't ever find in the natural environment, does not conduct electricity. Water becomes a conductor once it starts dissolving substances around it.

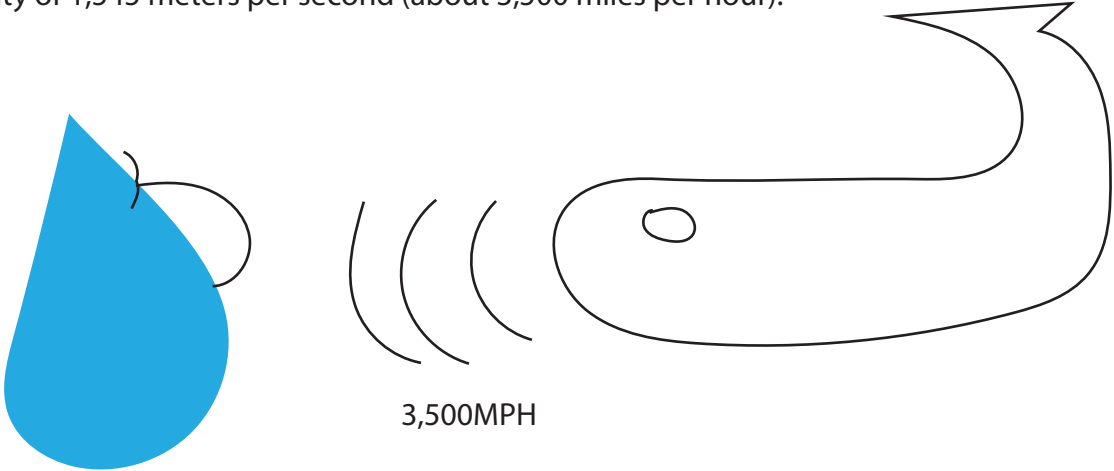


9. Water has a high heat index—it absorbs a lot of heat before it begins to get hot. This is why water is valuable to industries and in your car's radiator as a coolant. The high heat index of water also helps regulate the rate at which air changes temperature, which is why the temperature change between seasons is gradual rather than sudden, especially near the oceans.



10. Water has a very high surface tension. In other words, water is sticky and elastic, and tends to clump together in drops rather than spread out in a thin film, like rubbing alcohol. Surface tension is responsible for capillary action, which allows water (and its dissolved substances) to move through the roots of plants and through the tiny blood vessels in our bodies.

11. The density of water means that sound moves through it long distances (ask a whale!). In sea water at 30°C, sound has a velocity of 1,545 meters per second (about 3,500 miles per hour).



12. Air pressure affects the boiling point of water, which is why it takes longer to boil an egg at Denver, Colorado than at the beach. The higher the altitude, the lower the air pressure, the lower the boiling point of water, and thus, the longer time to hard-boil an egg. At sea level water boils at 212°F (100°C), while at 5,000 feet, water boils at 202.9°F (94.9 °C).

