

# [The effect of water cement ration upon the compressive](https://assignbuster.com/the-effect-of-water-cement-ration-upon-the-compressive/)

[Science](https://assignbuster.com/essay-subjects/science/)

The paper " The Effect of Water Cement Ration upon the Compressive" is a worthy example of an assignment on science. Water is a natural chemical substance with the chemical formula H2O. The molecules of water are attached by covalent bonds. Water exists on Earth in different states; under ambient conditions, it is a liquid when near hydrophilic surfaces it exists as liquid crystals, it also exists as ice and vapor. Water is important for all forms of life and it covers about 70% of the Earth even in the deserts as well as the clouds. For us humans, we cannot do without water because we drink, wash, play and cook using water. Only about 2% of the water on Earth is fresh as about 98% is in ice and groundwater. On Earth water usually moves continuously through a hydrological cycle i. e. evaporation, transpiration, condensation, precipitation, and runoff. As water is important to all life forms it should be safe for drinking. For this reason, access to safe water has improved over time in almost every part of the world but there are still shortcomings on the same. Recent reports found out that there will be a higher demand for water compared to the supply, especially in developing nations. This is because water plays a vital role in the world economy at large, as it is used as a solvent for a wide range of chemical substances, industrial cooling, and even transportation. It is amazing that the amount of water on Earth does not change as it is the same since the ancient days. The same water cannot also be seen as pure as it dissolves so many substances and can only be made pure in the laboratory. Properties of waterWater is unique as it is the only natural substance found in all three physical states i. e. solid, liquid and gas at various temperatures on Earth. The following are the properties of water; It freezes at 15 °C and boils at 100 °C. Air pressure affects the boiling point as they are directly proportional. For example, at sea level water boils at 100 °C while at 5000ft it boils at 94. 9 °C. Water has a high specific heat index as it absorbs a lot of heat before it begins getting hot. It absorbs/releases more heat for each degree of temperature increase/decrease. This enables it to be used widely for cooling and transferring heat in chemical and thermal processes. Pure water has a neutral ph of 7 and does not conduct electricity unless it has dissolved substances. The molecule is also highly cohesive compared to other non-metallic liquids. It has a very high surface tension as it tends to form clumps in drops rather than spread out. This high surface tension is responsible for the capillary action allowing water to move through the roots and blood vessels in plants and humans respectively. Water molecules are polar; this because as a whole molecule, one end (hydrogen end) tends to have a positive charge while the other (oxygen end) has a negative charge. This difference causes attraction which is responsible for cohesion.