



**ACROSS**

- 1 A \_\_\_\_\_ bond is a special type of dipole-dipole bond that exists between an electronegative atom and a hydrogen atom bonded to another electronegative atom.
- 3 \_\_\_\_\_ (hypohydration) is the removal of water from a substance.
- 6 \_\_\_\_\_ is any product of the condensation of atmospheric water vapor that is deposited on the earth's surface.
- 7 \_\_\_\_\_ refers to the physical property of a molecule that is repelled from a mass of water
- 9 Water \_\_\_\_\_ is the gas phase of water.
- 11 \_\_\_\_\_ is the name given to any one of the 14 known solid phases of water.
- 13 The self-\_\_\_\_\_ of water is the chemical reaction in which two water molecules react to produce a hydronium and a hydroxide ion.
- 15 \_\_\_\_\_ is the common name for the cation derived from protonation of water.
- 16 In physical chemistry, and in engineering, \_\_\_\_\_ refers to vaporized water.
- 17 \_\_\_\_\_ water is water which contains a higher proportion than normal of the isotope deuterium, as deuterium oxide, or as deuterium protium oxide.
- 19 \_\_\_\_\_ is water located beneath the ground surface in soil pore spaces and in the fractures of lithologic formations.

**DOWN**

- 1 \_\_\_\_\_ refers to a physical property of a molecule that can transiently bond with water through hydrogen bonding.
- 2 The Earth's water is always in movement, and the hydrologic or water \_\_\_\_\_ describes the continuous movement of water on, above, and below the surface of the Earth.
- 4 A \_\_\_\_\_ is a chemical compound possessing both hydrophilic and hydrophobic properties.
- 5 \_\_\_\_\_ is a cloud in contact with the ground.
- 8 \_\_\_\_\_ is the most common name for the diatomic anion, consisting of oxygen and hydrogen atoms, usually derived from the dissociation of a base.
- 10 A \_\_\_\_\_ is an underground layer of water-bearing permeable rock or unconsolidated materials (gravel, sand, silt, or clay) from which groundwater can be usefully extracted using a water well.
- 12 \_\_\_\_\_ is the net movement of water across a partially permeable membrane from a region of high solvent potential to an area of low solvent potential, up a solute concentration gradient.
- 14 \_\_\_\_\_ is a common chemical substance that is essential to all known forms of life, typically referred to in its liquid form or state, but also having a solid state, ice, and a gaseous state, which are commonly encountered.
- 18 \_\_\_\_\_ is water in the form of droplets that appears on thin, exposed objects in the morning or evening.