

Name _____

In the Middle of It All: The Mystery of Neutral Substances

Short Answer Key

1. Pure water is considered a neutral substance because it has an equal concentration of hydrogen ions (H^+) and hydroxide ions (OH^-), resulting in a balanced solution with a pH of 7.
2. One example is blood, which maintains a slightly alkaline pH of around 7.4. This is crucial for enzyme function, chemical reactions, and overall bodily function.
3. Scientists use pH indicators or meters to measure the concentration of hydrogen ions (H^+) in a substance. If the pH is 7, the substance is considered neutral.
4. Achieving true neutrality can be challenging due to various factors, such as the absorption of carbon dioxide by rainwater or the presence of contaminants in natural water sources.
5. Controlling the pH of experiments is important in laboratory settings to ensure the accuracy and reliability of experimental results. It allows researchers to maintain stable conditions for reactions.

