

## 2.2 Properties of Water

### The Water Molecule

For Questions 1–4, write True or False on the line provided.

- \_\_\_\_\_ 1. Water is a polar molecule.
- \_\_\_\_\_ 2. Hydrogen bonds are an example of adhesion.
- \_\_\_\_\_ 3. Covalent bonds give water a low heat capacity.
- \_\_\_\_\_ 4. A hydrogen bond is stronger than a covalent.

### Solutions and Suspensions

5. Complete the table

Substance	Definition	Example(s)
	Physical combination of two or more substances	Cinnamon sugar
Solute		Salt in saltwater
	Mixture of water and nondissolved substance	Blood
Solution		

### Acids, Bases, and pH

6. What makes pure water neutral?

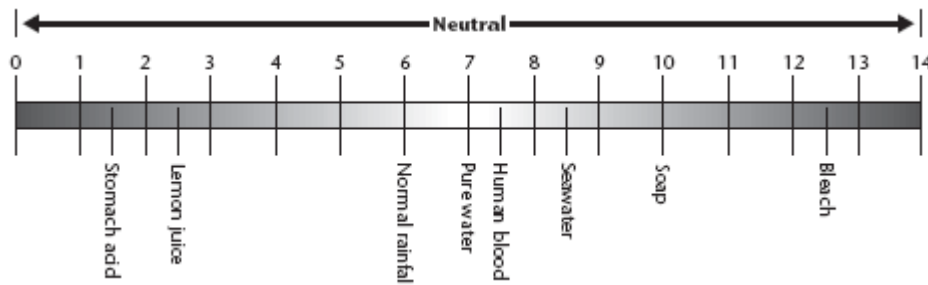
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7. What does the pH scale measure?

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8. On the pH scale, indicate which direction is increasingly acidic and which is increasingly basic.



9. Identify two solutions that have more  $\text{H}^+$  ions than  $\text{OH}^-$  ions.

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10. Identify two solutions that have more  $\text{OH}^-$  ions than  $\text{H}^+$  ions.

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11. How would you buffer a solution that has a pH of 12?

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### Apply the Big idea

12. Why are buffers important to living things?

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