

AP Biology - Acids, Bases, & pH

Video Review Sheet

<http://www.bozemanscience.com/acids-bases-ph/>

1. Why is it important that pH levels remain constant for proteins?
2. Water and its Polarity:
 - a. A water molecule contains two _____ atoms & one _____ atom..
 - b. There is a _____ between the hydrogen and the oxygen.
 - c. Oxygen is going to pull the _____ towards it.
 - d. Oxygen is going to have a partial _____ and the hydrogens are going to have a _____.
 - e. How is a hydrogen bond formed?
3. When the attraction between water molecules is so great, what happens to the hydrogen atom?
4. The water molecule with the extra hydrogen atom is called
5. The water molecule with the missing hydrogen atom is called
6. What does pH stand for?
7. In distilled water, the amount of hydronium occurring is
8. What does it mean if the pH is 7?
9. Acids:
 - a. When hydrochloric acid is added to water, it's going to break down into hydrogen ions and chloride ions, increasing the amount of _____.
 - b. Instead of the concentration being 1 in 10,000,000, it might be as often as 1 in _____.
 - c. $-\log [1 \times 10^{-2}]$ equals a pH of
10. Bases:
 - a. What happens with the hydroxide and hydrogen ion?
 - b. What does this do to the amount of hydrogen ions?
 - c. $-\log [1 \times 10^{-12}]$ equals a pH of

11. Increasing the amount of hydrogen ions in a solution _____ the pH

12. Acidification:

a. How have oceans become more acidic over the years?

b. By decreasing a _____ amount in the pH, there is going to be an _____ in the hydrogen ions.

c. _____ seems to be correlated with the acidification of our oceans.