

## Chapter 2

The pH range in which organisms can live is really very small. In a pond organisms can only live with a healthy pH of \_\_\_\_\_ and will die when the pH reaches around \_\_\_\_\_. Google the optimal pH of the human body. It is between \_\_\_\_\_ and \_\_\_\_\_ - a VERY small range!

Give 2 examples of common, everyday acids. \_\_\_\_\_ and \_\_\_\_\_

Acids give off \_\_\_\_\_ ions when in water.

Bases produce \_\_\_\_\_ ions when in water. Two examples of common, everyday bases include: \_\_\_\_\_ and \_\_\_\_\_.

Learning Check AB1:

**Describe the solution in each of the following as: 1) acid 2) base or 3) neutral.**

- A. \_\_\_ soda
- B. \_\_\_ soap
- C. \_\_\_ coffee
- D. \_\_\_ wine
- E. \_\_\_ water
- F. \_\_\_ grapefruit

Learning Check AB2:

**Identify each as characteristic of an A) acid or B) base**

- \_\_\_ 1. Sour taste
- \_\_\_ 2. Produces OH<sup>-</sup> in solutions
- \_\_\_ 3. Chalky taste
- \_\_\_ 4. Is an electrolyte (produces ions)
- \_\_\_ 5. Produces H<sup>+</sup> in solutions

The pH scale ranges from \_\_\_\_\_ to \_\_\_\_\_ with \_\_\_\_\_ being Neutral. The approximate pH of stomach acid (HCl) would be \_\_\_\_\_. An estimated pH of a strong base like oven cleaner might be \_\_\_\_\_.

What is a pH indicator? \_\_\_\_\_ Give  
one example of a pH indicator \_\_\_\_\_.

You test an unknown substance with litmus paper in the lab. The paper turns blue. This tells you the substance is a(n)  
\_\_\_\_\_. Will litmus tell you exactly what pH the substance is? Explain.

\_\_\_\_\_

What is Neutralization? \_\_\_\_\_

Give one example from the powerpoint.

\_\_\_\_\_

Give one example of a neutralization reaction that is important to the human body and is not listed in the powerpoint.

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