**Acids and Bases**

**Study Guide**

**Circle the correct answer for the following questions.**

1. Which of the following is an example of an acid?

 soap saliva lemon juice egg whites

1. Which is the **safest** way to test a substance for acidity and alkalinity?

by pouring it onto a hard surface by putting some on your hands by using litmus paper by tasting it

1. What type of ions do acids give off?

helium hydrogen hydroxide hydronium

1. If a substance is neutral, what is its pH?

 zero one seven fourteen

1. What would be a reasonable pH level of the dish soap in your kitchen?

two four six ten

1. Toothpaste most likely has a pH of which of the following?

 three five seven nine

1. How does an acid taste?

 sweet sour bland bitter

1. What number on a pH scale would an extremely strong acid have?

 one seven nine fourteen

1. What number on a pH scale indicates a strong base?

two six eight thirteen

1. What are some characteristics of bases?

bases taste bitter and can only be tested by tasting them

bases are lightweight and cannot be tested with litmus paper

bases taste sour and can sometimes by slippery

bases taste bitter and can sometimes by slippery

1. Which substance would change an indicator from red to blue when tested?

a cola drink lemon juice a bar of soap white vinegar

1. Which of the following substances is NOT a common base?

 ammonia bar of soap baking soda vinegar

1. If cabbage juice turns green when mixing it with a substance, according to the red cabbage indicator chart which of the following would have been used?

 a neutral a base an acid an indicator

**Fill in the blanks with the correct answer.**

1. A substance’s\_\_\_\_\_\_\_\_\_\_\_\_\_ level can be tested using indicators.
2. Substances with a low pH are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. Substances with a high pH are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. Substances with a ph of 7 are considered \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. A healthy environment for life has to maintain pH level close to \_\_\_\_\_\_\_\_\_\_.
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ can be used to test substances for pH levels if you don’t have real litmus paper.
7. \_\_\_\_\_\_\_\_\_\_\_ turn pH paper blue, and \_\_\_\_\_\_\_\_\_\_\_ turn pH paper red.
8. pH stands for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
9. ph is a measurement of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
10. A property of acids when touched is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ sensation.
11. According to the red cabbage indicator chart, \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_are colors that show something is a base.