Acids, bases Lab

student page

**Part 1: Acids & Bases**

This week, you’ve learned about acids and bases. Today, it’s time to see some examples of acids and bases in your everyday life using indicators. An **indicator** is something that changes color when placed in acids and bases. The two types of indicator strips you’ll be using today are litmus paper and pH paper.

**Litmus paper** comes in two colors-red and blue. Red litmus paper is an indicator of bases because it turns blue in a base. It does not change color (other than looking wet) when placed in an acid. Blue litmus paper works in the opposite way. Blue litmus paper tests for acids and turns red when in contact with an acid.

Litmus paper is limited in that it can’t tell you how acidic or basic a solution is. **pH paper** provides us with a clearer determination of the acidity or alkalinity (basic) of a substance. After you test each substance with the litmus paper, you’ll test it again with the pH paper.

Procedure:

1. List your liquids in the first column of both tables below.
2. For the first liquid, make a prediction about whether it is an acid or a base by using your knowledge about that liquid. If you need a hint, you can go back and review the characteristics of acids and bases. Write your prediction in the second column of Table 1.
3. Next, dip one strip of the red litmus paper in the first liquid. If it turns blue, write BLUE in the third column. If there is no color change, write NO CHANGE.
4. Finish Table 1 for all of the liquids.
5. When Table 1 is finished, dip one strip of the pH paper into the first liquid. Compare the color with the pH chart provided with the paper. Write the pH of that liquid in the second column of Table 2.
6. Finish Table 2 for all of the liquids.

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| **Table 1: Liquid** | **Prediction** | **Red litmus paper turned...** | **Blue litmus paper turned...** |
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| **Table 2: Liquid** | **pH** |
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