

Carbon dioxide experiment

Observation:

When we mixed 100ml of water, a few drops of bromothymol blue, and HCL together the liquid turned yellow. This proves that when there is an acid present, like HCL, the liquid will turn yellow.

Now that we know how to tell when an acid is present, we put 100ml of water into our beaker again and a couple drops of bromothymol blue. This time we blew bubbles from a straw to test the carbon dioxide in our breath. The mixture turned the same yellow as the other one did which proves we have carbon dioxide in our breath because there is an acid in carbon dioxide.

Lastly we tested lime water bromothymol blue and our breath. This time the liquid turned light green. The lime water was supposed to turn milky white. This was not the case probably because the lime water wasn't high enough concentration or our breath didn't have enough carbon dioxide in it.

Conclusion:

From this experiment I concluded that carbon dioxide is in our breath because carbon dioxide has an acid in it and when an acid mixes with bromothymol blue it turns yellow.

The lime water didn't go as predicted. I wonder how what ratio of our breath is carbon dioxide.