Breathing through Universal Indicator

Concepts

Explanation:

As you exhale through the straw the CO₂ interacts with the water to for carbonic acid.

$$\mathrm{CO}_2 + \mathrm{H}_2\mathrm{O} = \mathrm{H}_2\mathrm{CO}_3$$

This acid then dissociates in water to form HCO_3^- and H^+ . This H^+ then changes the pH making the solution more acidic.

Sources:

If you have other explanations, concepts, or ideas for this demonstration please share them by contacting our Chem Demo team (<u>bedell@nku.edu</u>; <u>sieveb1@nku.edu</u>). We will pass them on to the community and credit you with the ideas.