

LIMNIC ERUPTIONS STATION #2B

KWLA Question: How would CO₂ affect the water in Lake Nyos?

Investigation: How does the dissolving of CO₂ in the lake affect the pH of the lake water?

Materials:

- Beaker or cup
- Distilled Water
- Universal Indicator, 2 ml - (Optional)
- Dilute Sodium Hydroxide (NaOH) - (Optional)
- Dry ice
- Vernier LabQuest⁹
- Vernier pH probe⁹

Procedure:

1. Obtain a beaker of distilled water.
2. Add about 2 mL of Universal Indicator if desired. You may need to add a few drops of NaOH until the solution turns green.
3. Connect the pH Probe to CH 1 of the LabQuest. (**CAUTION: Do not immerse the pH probe in the water past the top of the probe.**)
4. Turn on the LabQuest. You should see the red meter screen.
5. Place the pH probe in the water and allow the reading to stabilize.
6. Press the **Start** button to begin data collection.
7. After you see the first 2-3 points of the graph, drop a piece of dry ice into the water.
8. When finished the graph will autoscale. Sketch graph.

Outcome: (Analyze in your Limnologist's Journal.)

*See Sources page for footnote references.