

LIMNIC ERUPTIONS STATION #1A

KWLA Question: Why is Lake Nyos “layered” or stratified?

Investigation: How does the temperature of the water affect the layering of the Lake?

Materials:

- 500 mL of warm water colored red
- 500 mL of cold water colored blue
- 2 beakers or containers
- hot plate
- ice
- Density box¹⁰
- Vernier LabQuest⁹
- Vernier Temperature probe⁹

Procedure:

1. Connect the Temperature Probe to CH 1 of the LabQuest. (**CAUTION: Do not immerse the Temperature probe in the water past the top of the probe.**)
2. Turn on the LabQuest. You should see the red meter screen.
3. Test the temperature of the warm water and the cold water. Record values.
 - a. Warm water _____
 - b. Cold water _____
4. **SIMULTANEOUSLY** pour warm water into the side of the density box and pour cold water into the other side of the density box.
5. Remove the divider in the density box. Make observations:

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

*See Sources page for footnote references.