

Climate Boggle A Lesson Plan:

OVERVIEW:

Students, in pairs, will analyze actual climate data from different locations in different climatic zones, create graphs of temperature and precipitation, and try to match that with a numbered location on the map. Students will then be responsible for a class consensus for all location and data matches.

Optional: If done with older students, may be able to have them put a pin in their own location on the map without numbered locations, but would be considerable harder.

⊕ Intro: (5 min or less)

-Set context (*"Climate experts invited to solve this mystery....."*)

-Highlight key points of the activity (also written on board)

1. Create 2 line graphs; one for high and low temperature, and one for monthly precipitation. (*have examples on the board if necessary*)
2. Post graphs up on front board under your climate data's letter.
3. Tour the world map with numbered post-it locations, claim one as yours, and write it up on the board under your graphs.
4. Consult with your peers as to their choices, there is only one right match for each letter and number. Must have class consensus.
5. If all matches are correct secret message will be revealed.
(*Each data set has a word in the lower corner. The first word in the sentence will come from the data set that matches with location 1 on the map, the second word will come from location 2, etc.*)

⊕ Graphing of the data: (15 minutes max)

- *I pre-constructed the graph paper so that all graphs will be set up the same when posted on the board for easy comparisons.*

⊕ **Identify locations - graph and map comparisons:**
(20 minutes or until exhausted)

- *If they thought they were done and had more than 2 wrong answers I would say something like: "There are 5 wrong answers on the board, I challenge you to correct them in 2 minutes."*

- Generate the secret message and see if it makes sense, final switches in matches take place if not all correct.
*(I had 9 data sets and used the following sentence as the hidden message:
Global Climate Change Depends On Choices You Make Now!)*

⊕ **Wrap-up / Debrief:** (10 minutes +)

- Identify all locations by name, look at their weather patterns.
- World's climate zones (map or overhead)
- What did we discover?

Materials Needed:

Pre-made graph paper (or have students lay it out)
Markers and rulers for colorful graphs
Intro letters (not necessary but I thought it might be fun.....)
Climate data (enough for each pair of students)
Large world map (preferably not political)
Small numbered Post-it notes for map