

Comparing and Contrasting Precipitation in the Andes to North Carolina

Subjects- Science, Math

Grade Level- 2nd

Approximate Time- 5 weeks

NC Science Essential Standards-

- 2.E.1 Understand patterns of weather and factors that affect weather.
- 2.E.1.2 Summarize weather conditions using qualitative and quantitative measures to describe: • Temperature • Wind direction • Wind speed • Precipitation
- 2.E.1.3 Compare weather patterns that occur over time and relate observable patterns to time of day and time of year.
- 2.E.1.4 Recognize the tools that scientists use for observing, recording, and predicting weather changes from day to day and during the seasons.

Common Core Math Standards-

- CCSS.MATH.CONTENT.2.OA.A.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
- CCSS.MATH.CONTENT.2.OA.B.2 Fluently add and subtract within 20 using mental strategies.
- CCSS.MATH.CONTENT.2.MD.D.9 Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.
- CCSS.MATH.CONTENT.2.MD.D.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories.

Materials-

- Thermometer
- Chart paper
- Rain gauge
- Rain gauge log
- Discovery Ed

Week 1-

- **Whole Group-**

- Teacher will show the whole class a rain gauge (not telling them the name) and will have students “Turn and Talk” to discuss what they think the Weather Tool is used for.
- Students will share with the class.
- Teacher will a short Discovery Education video on how to collect rainfall in a rain gauge.
- Teachers will share with the student that they will begin checking the rain gauge each morning at 8:00 to find out the rainfall each day. Students will also be shown the Rain Gauge Log that students will be filling out each day.
- Students will collect rainfall each day and will write down their findings in the class log.
- Students will have a whole group discussion about their findings at the end of the week.

Week 2

- **Small Group-**
 - Students will collect rainfall and temperature each day and will write down their findings in the class log.
- Students will have a whole group discussion about their findings at the end of the week.

Week 3

- **Small Group-**
 - Students will collect rainfall and temperature each day and will write down their findings in the class log.
 - Students will have a whole group discussion about their findings at the end of the week.

Week 4

- **Small Group-**
 - Students will collect rainfall and temperature each day and will write down their findings in the class log.
 - Students will have a whole group discussion about their findings at the end of the week.

Week 5

Day 1, Week 5

- **Whole Group-**
 - Students will review how to create a pictograph and a bar graph.
- **Group Work-**
 - Students will be divided up into 2 groups.

- One group will take the Precipitation Data and will create a pictograph while the other group will create a bar graph.
- **Whole Group-**
 - Students will share their graphs.
 - They will analyze and discuss their observations of their data.

Day 2, Week 5

- **Whole Group-**
 - Teacher will use Google Earth to show the students where the Tropical Andes are located.
 - Students will then make observations on the location of the Andes
- **Partner Work-**
 - Students will work with a partner in order to write down their inferences on what the rainfall would look like in the Tropical Andes over the past 4 weeks.
 - Students will write down their inferences on chart paper.
- **Whole Group-**
 - Teacher will have each pair share their inquires with the rest of the class.

Day 3, Week 5

- **Whole Group-**
 - Teacher will show the precipitation data in the Tropical Andes over the past 4 weeks.
 - As a whole group, the students will compare and contrast their own Data from North Carolina to the data from the Tropical Andes.
 - Students will discuss and infer their thoughts about the differences in Data.
- **Independent Work-**
 - Students will work independently to compare and contrast the precipitation in the Tropical Andes and the precipitation that they have been collecting at their school.
 - Students will also include their hypothesis of their findings.