

TEACHER APPRECIATION WEEK CONTEST

Weather-Related STEM Lesson Plan



TEACHER

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SCHOOL

Collister Elementary School

LOCATION

Boise, ID



LESSON MATERIALS

- School weather station
- Large paper for graphing
- Markers
- Technology

KEY VOCABULARY

- Temperature
- Precipitation
- Line graph
- Bar graph
- Histogram
- Precision
- Variables

"This lesson great because it helps students interpret information and present claims based on evidence and observation of data." - Farth Networks Team

GRAPHING WEATHER DATA

INTENDED STUDENTS

Middle school students

DESCRIPTION

This lesson plan Iis designed to engage students in mathematical thinking and evidence-based reasoning through the analysis of graphing data.

LESSON INSTRUCTIONS

- Break class into pairs and assign a weather station measurement to each pair (ex: Temperature, wind speed, wind direction, etc)
- Instruct your class to research historical weather data for your location and record information in a <u>spreadsheet</u>
- Gather <u>current data</u> from school weather station for one month
- Assign student teams to fill in information by day or category
- After data entry is complete, discuss any trends, patterns, or observations, such as:
 - Are there numbers that look out of place?
 - What do you think a graph of this data will look like?
 - How do our temperatures compare to the average?
- Divide students into groups of 2-4 to graph
- Using large sheets of paper, student groups will graph either the daily high temperatures and the average temperature for each day of the month, or the daily low temperature and the average
- Discuss how data tells a story