

## TEMPERATURES AROUND THE STATE

### OBJECTIVE:

STUDENTS WILL ANALYZE TEMPERATURE DATA TAKEN FROM 9 OTHER LOCATIONS AROUND THE STATE. IN GRAPHING THE DATA STUDENTS WILL DISCOVER RELATIONSHIPS BETWEEN TEMPERATURES AND ELEVATION.

### PROCEDURE:

STUDENTS WILL CREATE A SCATTER PLOT GRAPH TO REPRESENT 9 DIFFERENT SETS OF DATA THAT HAS BEEN COLLECTED OVER A 24 HOUR PERIOD. THE NAMES OF THE OTHER LOCATIONS AS WELL AS THEIR ELEVATION ARE ALSO NEEDED. STUDENTS WILL GRAPH EACH SCHOOL LOCATION IN A DIFFERENT COLOR. IF THEY RUN OUT OF COLORED PENS THEN THEY CAN CONNECT THE POINTS WITH DASHED OR DOTTED LINE PATTERNS. STUDENTS WILL NEED TO CREATE A KEY FOR THEIR GRAPH. THE KEY SHOULD SHOW THE COLORS USED, LOCATION NAME AND ELEVATION. AFTER ALL STUDENTS HAVE FINISHED THE GRAPHS-HAVE THEM ANSWER THE FOLLOWING QUESTIONS.

### FOLLOW UP QUESTIONS

1. WHAT PATTERNS DO YOU SEE IN YOUR GRAPH?
2. WHAT LOCATION SHOWS THE GREATEST RANGE OF TEMPERATURE CHANGES? WHAT IS ITS ELEVATION?
3. PICK ONE LOCATION AND GIVE ITS AVERAGE DAILY TEMPERATURE.
4. AT WHAT TIME DO YOU FIND THE LOWEST TEMPERATURE FOR EACH LOCATION? WHY DO YOU THINK IT IS LOWEST AT THAT TIME?
5. AT WHAT TIME DO YOU FIND THE HIGHEST TEMPERATURE FOR EACH LOCATION? WHY DO YOU THINK IT IS HIGHEST AT THIS TIME?
6. IS THERE A RELATIONSHIP BETWEEN ELEVATION AND TEMPERATURE? WHERE DO YOU SEE IT?



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LABEL EACH PLOT LINE WITH CITY NAME AND ELEVATION

