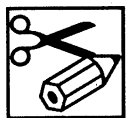


Seasonal Graphs

Leader

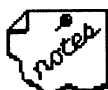


Represent data symbolically.



You will need:

- Thermometer(s)
 - Celsius
 - Fahrenheit
- Graph paper
- Pencil



If thermometers are not handy, locate a building that displays the temperature in your area, or use the listings in the daily paper. If you use the daily paper, your observations will always be one day behind.



Do this:

- Take readings on both scales at the same time every day for three months. The 90-day period should, ideally, include a seasonal change. Connect the points and analyze the data over time.



1. Does the temperature change dramatically ($\pm 15^\circ$) over the observation period?
2. Can you observe a trend?
3. Do major changes in temperature occur from one day to the next?
4. Do these major changes or fluctuations change the overall trends?

- Compare the differences in the Celsius and Fahrenheit. (Use two different colors in plotting the two scales).



1. Do they look different? If so, how?
2. Do they intersect? Where? Why? Under what circumstances?



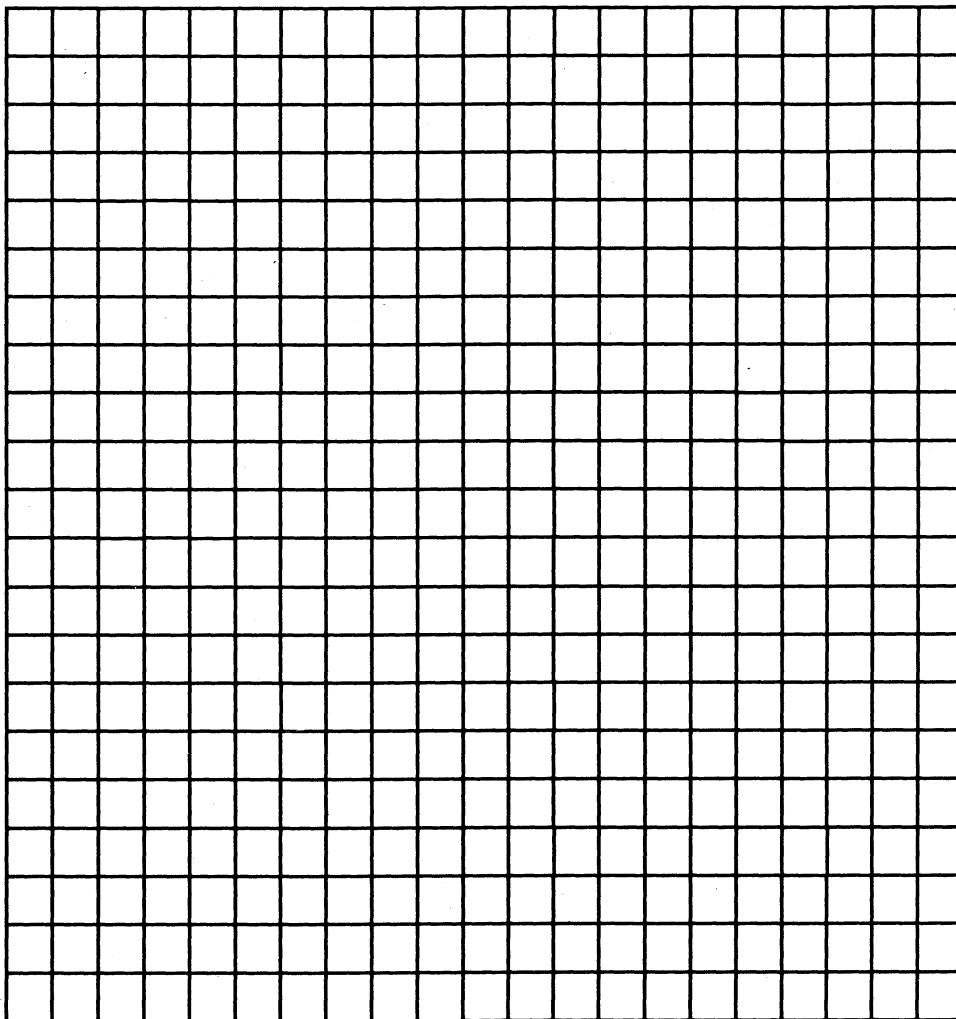
Student _____



Do this:

- Record the temperature at the same time of day (in F°) (in C°) every day for a 90-day period.
- On graph paper use the X-axis (horizontal) for each day of the week and use the Y-axis (vertical) for temperature. Each line represents two degrees. Depending on the season and “normal” temperature range in your area, you will have to decide at what temperature to start your Y-axis. (If you start your project in November and you live in Boston, will you start your axis at 70°?)
- Every day at the same time check your thermometer (it may be your own, or the one on the side of the local bank, or the hourly temperature rating listed in the newspaper).
- Find the point on your graph where the line for the date intersects with the line (real or estimated) for that temperature.
- Note the change over the three-month period.

Temperature



Dates



WHAT I FOUND