

Lesson 4: What Influences Temperature?

Let's see if we can predict the weather.

4.1: Temperature Changes

What factors or variables can influence the outside temperature?

- Make a list of different factors.
- Write a sentence for each factor describing how changing it could change the temperature.

Example: One factor is time of day. Often, after sunrise, the temperature increases, reaches a peak in the early afternoon, and then decreases.

4.2: Is Temperature a Function of Latitude?

1. Andre and Lin are wondering if temperature is a function of latitude.

Andre says, "I think it is, as long as we fix the time when we are measuring the temperature."

Lin says, "But what if you have two places with the same latitude? Look at this weather map for Washington State. Seattle and Spokane have the same latitude but different temperatures right now."

What do Andre and Lin mean?



2. Andre and Lin are discussing whether it is possible to define latitude and temperature in a way that makes sense to talk about temperature as a function of latitude. They are considering different options. What are some advantages and disadvantages of each option?

Here are the options:

- a. Finding the temperature right now in cities with different latitudes.

