**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Height and Structure of the Atmosphere Excel Lab**

1. **Go to classroom website:** [**www.mspricescience.weebly.com**](http://www.mspricescience.weebly.com)
2. **Click on Geology page and scroll down to Chapter 17 and click on Upper Air and Temperature Excel Lab**
3. **Click Open and begin working.**
4. **Go to:** [**http://weather.uwyo.edu/upperair/sounding.html**](http://weather.uwyo.edu/upperair/sounding.html)
5. **Click on the map to request an upper air sounding at a specific location**
6. **This should be automatically set, but make sure the Region is North America, Type of plot is Text:List, Year is Set to this year, and the month is set to today’s month.**
7. **Click on ABQ to get Albuquerque’s reading**
8. **Copy the data (just the numbers) and paste it into your scrap sheet in Excel**
9. **Change the data to columns (text to columns on the data menu bar, select next, next, finish)**
10. **REMEMBER your first column on your scrap sheet is Pressure, Second column is height, and third column is temperature**
11. **Copy in data from the first column on the scrap sheet and paste it into the Pressure column on the DATA TABLE & GRAPHS sheet in the spreadsheet. ONLY SELECT DATA WHERE THE FIRST THREE COLUMNS ARE ALL FILLED IN WITH NUMBERS (Don’t use first three or last rows)**
12. **Repeat for temperature and pressure values.**
13. **Look at the graphs that are generated and answer the following questions:**
	1. **How is elevation related to pressure? Explain why.**
	2. **How is elevation related to temperature? Explain why.**
	3. **Based on your answers to part a and b, how are pressure and temperature related?**
	4. **Look at the Elevation vs Temperature Graph again. Why does the graph not look like a straight line at temperatures above around 12000 m (12 km)?**