Name _____Per _____Score_____

How does surface temperature vary with location?

Today you are going to plan and carry out an investigation to determine if surface temperature is affected by location. You are then going to analyze your data and construct an explanation using your data.

We are going outside to carry out this investigation. Choose at 5 very different locations from which to measure surface temperature.

1. Predict which location will have the highest temperature and which will have the lowest temperature:

_____

Start by standing in the sun and holding the thermometer from the top, stretch out your arm. Time for one minute. What is the temperature of the air? 2. _____

- Place the thermometer flat on the 1st location. Set the time for 60 sec. Record the temperature in Celsius.
- Move to location 2-5 and test each for 1 minute.
- After you have tested each location, repeat the test again for trial 2 and then again for trial 3.
- For each location, add the 3 trials together and divide by 3. Round to the nearest whole number to get your average temperature.

	Location	Trial 1	Trial 2	Trial 3	Average Temperature
1					
2					
3					
4					
5					

Lab Report (Do this side after you finish the experiment) USE COMPLETE SENTENCES

Question: (What were we trying to figure out?)

_____

Prediction: ((What did you think would be the high and low?) _____

_____

Experiment Steps: (Number the steps and explain how you did the experiment.)

1.

2.

3.

4.

5.

Independent Variable (X axis): _____

Dependent Variable (Y axis) : _____

Constants: (list 2) _____

Experiment Data: Make a graph. Include an appropriate title and label the X and Y axis.

Analysis: What did you observe? _____

Why do you think you got the results that you did? _____

_____

Conclusion: Which location had the highest and lowest temperature? _____ _____

Was your prediction correct or incorrect? Give evidence to support your conclusion. _____

_____

What new questions did this lab generate? What is another similar experiment would you like to try using the same materials? __

_____

_____