Name: ________________________ Climate Variability Period: _____

Procedure

1. Shuffle the deck of cards. Black cards represent cooler (- temperatures) global average temperatures for one year and red cards represent warmer (+ temperatures) global average temperatures.
2. Flip 30 cards over and record each one in the first table.The change in temperature for each card is provided. Note: This represents the temperature change from ***normal*** for each individual year over a 30 year period.

Card Face Value	Temperature Change
Ace	No change
Two through Ten	± 0.2F through 1.0F
Jack	± 1.5F
Queen	± 2.0F
King	± 2.5F

Card	Card Face Value	Temperature Change
1		
2		
3		
4		
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Card	Card Face Value	Temperature Change
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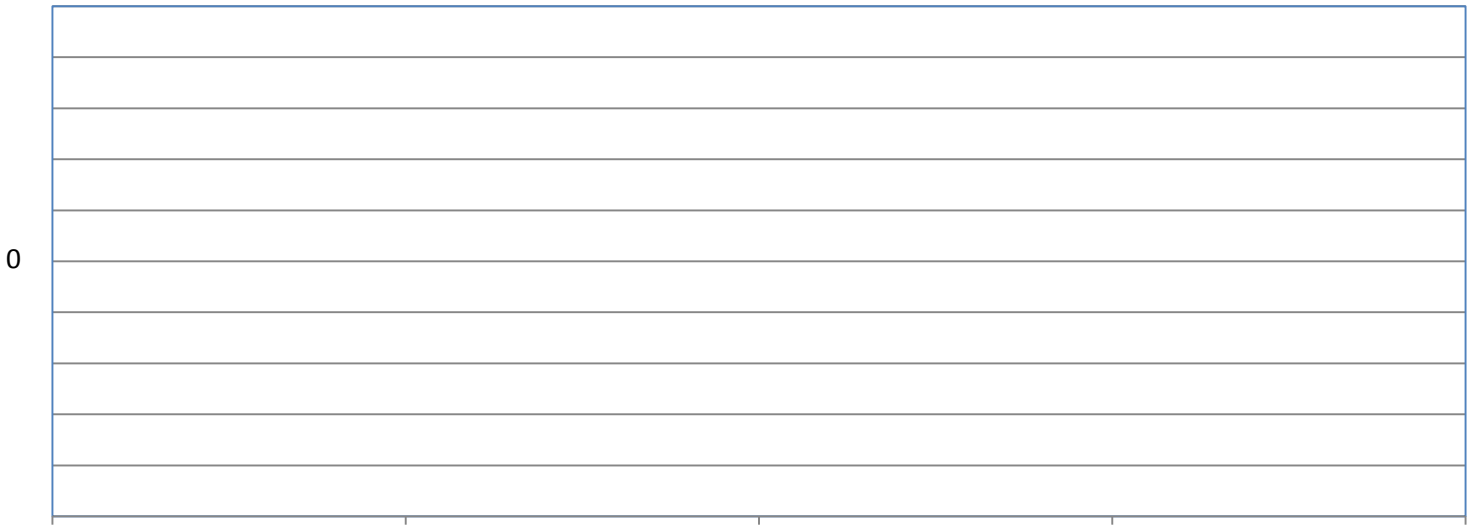
Adapted from http://www.ucar.edu/learn/1_2_2_9t.htm



3. Graph the data from the cards you flipped over and recorded in the chart. Label your axes and title your graph.
4. Shuffle all of the cards together and remove the first four black cards that are flipped over.
5. Reshuffle the cards (minus the cards that were removed) and repeat steps 2 and 3.Record your values in the table provided.
6. Remove 8 black cards from the deck so that 12 black cards are now removed. Reshuffle the deck and repeat steps 2 and 3 once more.
7. Graph all data in the graph above.

Analysis

1. Define climate.

2. What does removing the black cards represent? (Look at your data)

3. How does this activity compare and contrast to the pattern of climate variation?

4. Compare results with another group for your last trial. How come the results/graphs are different? What does each different group represent?