

100 years of climate change game rules

With a partner, obtain a regular deck of 52 cards and a high value prize (e.g., a snickers bar) each. You will risk your prize in order to obtain your partner's prize.

Black cards are "cooler", red cards are "warmer", and your partner will collect cards of only one color to cause either global warming or cooling. You have to guess which it is, and bet your prize on it!

1. **Shuffle the deck**, then lay out 10 cards. Each card represents the temperature in each of the 10 years in a decade.
2. Compute the temperature anomaly for the 10-year period by adding up the temperature for each card. The temperatures are Ace to 10 = 0.5K, Jack = 1K, Queen = 1.5K and King=2K. Black cards are negative, red cards are positive.
3. Plot the 10-year temperature anomaly on a graph, starting with the first value at 10 years.
4. Gather up the cards, and have your partner secretly remove 2 cards **of the same color** (which 2 is up to them).
5. Repeat step 1-4 to add obtain the temperature anomaly for the next 10 year period, and plot this on your graph.
6. At the end of each 10 year period, look at your graph, and make a decision. Do you think there is global warming or global cooling? On the graph write "W" or "C". If you are confident, circle it, and declare:
"I bet my sweet Snickers it's global [cooling/warming]!"
7. Continue for a total of 10 rounds to complete the graph at 100 years. Remember, your partner must always remove the SAME COLOR cards.
8. Use the final value at year 100 to determine if your prediction was correct.
9. Switch. Now it's your partners turn, and you get to remove the cards. As you partner plays, also plot their temperature on your graph (different color line), and note when they make their decision as well.

Who won?

If you decide correctly *before* your partner (you bet first), you win!

If you bet incorrectly (even if you bet first), your partner wins.

If you bet at the same time and both are correct, it's a tie.

If you both bet incorrectly, it's a tie.

Whoever wins most games (best of 5) gets the prize!

(No homework points for winners, but you do end up with two snickers bars!).

