

## Homework 12

Due by class Wednesday, March 4th

- 1. To turn in:** We made a mistake when we counted our poker hands. Don't worry, it's normal to make mistakes and part of every learning process. The important thing is to catch the mistakes and fix them. As you encountered with the last homework on three dice the more things there are the harder the problem gets. Let's cut our deck of cards down to just two suits, say diamonds and spades, and to just 4 numbers, say 2, 3, 4, and 5. Let's also cut our hand down to just two cards (instead of the normal 5). What is the total number of possible hands with this small deck and small hand way of playing? What is the probability of getting any pair? Bonus: Can you figure out what we did wrong when we counted these things in class? (Hint for this last one: We counted all the possible hands you could get without taking order into account at all.) I'll go over this in class, but I want you to give it a shot too.
- 2.** Read Ch. 3 of Benedict Carey's book *How We Learn*. It's called "Breaking Good Habits" and is about 20 pp, in about 4 sections. **To turn in:** What are three strategies from this chapter that can help your learning? One or two sentences here is fine.
- 3.** Read the excerpt from [Nate Silvers](#) *The Signal and The Noise*. This is roughly 23 pages, and broken into about 10 sections. **To turn in:** When you've completed the whole reading, put the excerpt away and explain in your own words the new way of thinking about probabilities that is being presented here. What is the definition of a probability? In words, how does a probability change over time? What do you think of the argument that we should ban frequentist statistics?