Finite random walks.

Suppose that we have $n$ points arranged on a circle. We always start at a given point, and move randomly either to the left or right, with equal probability. After how much time are we roughly equally likely to end up at any point? What if one changes the probabilities?

A similar, but more interesting, problem arises in card shuffling. Start with a deck of $n$ cards, in some fixed order. At every turn, we take out the top card and insert it in a random place. How often does this have to be repeated until the ordering of the cards becomes approximately random? How about the standard shuffling method (dividing the deck into two parts and exchanging those)?