Urn Game

We will play the Urn Game next class. As preparation, please think about the game, answer the two questions at the bottom of this page, **and turn in this sheet to the TA at the beginning of next lecture.**

Description of Urn Game:

- "Urn W" has two white balls and one yellow ball
- "Urn Y" has one white ball and two yellow balls.
- The TA flips a coin and picks up Urn W if Heads and Urn Y if Tails.
- Students are invited – one at a time – to pick a ball from the chosen urn and then guess whether it's Urn W or Urn Y. The class gets to learn each student's guess BUT NOT what type of ball the student saw. *The chosen ball is then put back into the urn.*

- Payoffs: You "WIN" if you guess correctly and "LOSE" if you guess incorrectly.

How would you play?

What would you do in the following two situations? Please briefly explain your answers.

1. You are the third person to pick a ball. The first person and the second person both guessed "Urn W". You draw a yellow ball.
   Would you guess "Urn W" or "Urn Y"?

2. You are the tenth person to pick a ball. The first seven people each guessed "Urn W" while the next two people each guessed "Urn Y". You draw a yellow ball.
   Would you guess "Urn W" or "Urn Y"?

Your Name: _____