Instructions

April 18, 2012

Welcome to today's experiment. Please read these instructions carefully as they explain how you earn money from the decisions you make in this experiment. Your minimum earning is a guaranteed $5 participation payment. There will be no talking during today's session. If you have a question, please raise your hand and an experimenter will come over to answer it in private.

Rounds and payment

You will participate in 10 rounds of decision making. Each round consists of a Decision Task and two Estimation Tasks – Estimation Task 1 and Estimation Task 2. At the end of the experiment, you will receive payment (in addition to your guaranteed $5 participation payment) corresponding to one round of the Decision Task, one round of Estimation Task 1 and one round of Estimation Task 2 – but these rounds will not be the same. In the round selected for payment of the Decision Task, the Estimation Tasks of this round will not be paid. In the round selected for payment of Estimation Task 1, neither the Decision Task nor Estimation Task 2 of this round will be paid. In the round selected for payment of Estimation Task 2, neither the Decision Task nor Estimation Task 1 of this round will be paid. You will not know until the end of the experiment which rounds have been selected for payment.

At the beginning of every round you will be randomly paired with one other participant. Both you and the person you are paired with face the same decision. You will be paired with another randomly selected person each round. Every person is equally likely to be paired with you, regardless of who you have been paired with in previous rounds. No participant will be able to identify you from one round to the next, or learn what you did in any previous round.

Decision Task

You will complete a Decision Task with your partner. This is the first part of each round and will be followed, in each round, by Estimation Task 1 and Estimation Task 2.

In the Decision Task each of you has a *choice* to make between an 'A' option and a 'B' option. The *choices* that you and your partner make may be modified by the computer before they are translated into *final choices* however. The outcome of the decision task depends on the *final choices* of you and your partner. We will first describe how the *final choices* affect your earnings, and then describe how your *choices* may be carried out as *final choices*.

If both you and your partner have the *A final choice* then you will both receive \$18. If your *final choice* is B, you will receive \$10 regardless of the *final choice* of your partner. If your *final choice* is 'A' but your partner's *final choice* is B then you will receive \$0 while your partner receives \$10. Table 1 describes your earnings in all possible combinations of your *final choice* and your partner's *final choice*. Table 2 describes your partner's earnings in all possible combinations of your *final choice* and your partner's *final choice*.

Table 1: Your earnings.

		Partner's *final choice*	
		A	B
Your *final choice*	A	18	0
	B	10	10

Table 2: Your partner's earnings

		Partner's *final choice*	
		A	B
Your *final choice*	A	18	10
	B	0	10

How do *choices* translate into *final choices*?

Every time you make a *choice*, the possible modification of that choice is determined by the flip of a coin and the roll of a 6-sided die. The die roll determines whether your choice is modified. The coin flip determines how your choice is modified, if it is modified. Both the die and the coin are completely fair, meaning that there is a 50-50 chance that the coin comes up Heads, and a 1/6 chance that a particular side comes up on the die.

If the die rolls 1-4, your *choice* is not modified before it becomes a *final choice*. If the die rolls a 5 or 6 your choice is modified to A when your coin flip is Heads and to B when your coin flip is Tails. Table 3 summarizes all possible cases.

Table 3: The *final choice* carried out for you as a function of your actual *choice* and the outcome of the coin flip and die roll

		Your die roll					
		1	2	3	4	5	6
Your coin flip	Heads	Your *choice*				A	
	Tails	Your *choice*				B	

As you can see in Table 3, a coin flip of Heads makes it possible that your *choice* gets changed to an A *final choice*, and a coin flip of Tails makes it possible that your *choice* gets changed to a B *final choice*. The transformation from *choices* to *final choices* is the same for your partner.

Before making your *choice*, the computer will tell you the outcome of your partner's coin flip, but not the outcome of your own coin flip. Your partner learns the outcome of your coin flip, but not her own. Neither you nor your partner will know the outcome of either die roll.

Example

A screenshot showing the interface is shown on the projector. The choice between A and B is given as radio buttons. When you have made your selection, you must press "OK". Note how the line above tells you your partner's coin flip – here being Tails.

Estimation Task 1 – Can you guess what others will *choose*?

In each round there are some number of people in the room (yourself not included) who observe their partner's coin flip to be Heads, and some number of people in the room who observe their partner's coin flip to be Tails. These numbers depend on the individual coin flips and can change each round. After you have made your *choice* in the Decision Task, you will be told how many people saw that their partner's coin flip was Heads, and how many saw that it was Tails. Your task is to guess how many of each group *chose A* rather than *B* for their *choice*.

Payment for Estimation Task 1

It is in your interest to report the numbers you think are most likely, as you will be rewarded $1.50 for each guess if it is correct. You will not receive a reward if your guess is not exactly equal to the number of people observing Heads of their partners who *chose A*, and likewise for those observing Tails of their partner. If both guesses are correct, you will earn $3.00.

Example

A screenshot showing the interface is shown on the projector. There are two lines with boxes next to each. The first line shows how many people in the room besides yourself saw their partner's coin to be Heads (9 in this example). You will input your guess for how many of those people *chose A* in the box to the right. Likewise there are 10 people who saw their partner's coin flip to be Tails in this example, so in the second box at the right you input your guess for how many of those 10 *chose A*.

What will your partner's *final choice* be?

Your guesses in Estimation Task 1 are about what other people will *choose*, but they also indicate how likely you think it is that your partner's *final choice* is A. The computer will assist you with the relevant probability calculations. The computer will use your answers to Estimation Task 1 to report onscreen the percentage chance you guess that your partner's *final choice* is A.

Example

A screenshot showing the interface is shown on the projector. This screen shows what your guesses in Estimation Task 1 imply about the likelihood that your partner's *final choice* is A. The computer has indicated the choice that is relevant to this example (partner's coin is Tails) and taken your guesses from both lines (since your partner could have seen that your coin was either Heads or Tails) of Estimation Task 1 to compute the likelihood here denoted "**calculated%**".

Estimation Task 2 – Can you guess what others will guess?

In each round, following Estimation Task 1, you will be asked to guess what you think others guessed about *choices* in Estimation Task 1. You will report this by filling out two columns that will appear onscreen. The table on the projector illustrates. Each row represents a possible response to Estimation Task 1. For each of these numbers, you must guess how many of the 19 people in the room (besides yourself) reported that number in Estimation Task 1. The computer will ensure that your guesses add up to 19 in each column before exiting this task.

It is in your interest to report the number you think is most likely for each response, as you will be rewarded $0.25 for each response where your guess is correct. You will not receive a reward if your guess is not exactly equal to the number of people who reported that number in Estimation Task 1. Note that since there are 22 possible responses to Estimation Task 1, you can earn up to $5.50 in Estimation Task 2 – if you guess the actual number of people who gave each response in Estimation Task 1.

Example

A screenshot showing the interface is shown on the projector. We will review multiple screens. This first screen shows all of the possible responses to the part of Estimation Task 1 asking how many of the 9 people who saw their partner's coin to be Heads *chose A*. You must make sure that your guesses add up to 19 since all of you answered this question. Shown are some randomly generated numbers that satisfy this requirement.

On the next screen we see the second component of Estimation Task 2. This shows all of the possible responses to the part of Estimation Task 1 asking how many of the 11 people who saw their partner's coin to be Tails *chose A*. Note that if we go back to the corresponding screen of Estimation Task 1, your possible responses were only 0 through 10. This is not a mistake. Note that since you and 10 other people saw your partner's coin to be Tails, the number of people *besides yourself* observing their partner's coin to be Tails is 10, but for the 9 people in the room who observed their partner's coin to be Heads, this number was 11 since they answered that question about *you*. That is why 11 is listed as a possible response. You must make sure that your guesses add up to 19 since all of you answered this question. Shown are some randomly generated numbers that satisfy this requirement.

At the end of the experiment, you will be able to see how your guesses on Estimation Task 2 compare with actual responses to Estimation Task 1. The next two screenshots illustrate. For the part of Estimation Task 1 asking how many of the 9 people who saw their partner's coin to be Heads *chose A*, the numbers we input are shown as bars on the above graph. Since the heights of the "2" bars and the "5" bars match for this portion of the task, then these responses earn $0.25 each. Likewise if we move to the results for the part of Estimation Task 1 asking how many of the 11 people who saw their partner's coin to be Tails *chose A*, the heights of the bars, for "2", "4", and "7" match, showing that there was 1 person who gave each response to this portion of Estimation Task 1. You earn $0.25 for these three guesses, meaning your total earnings on Estimation Task 2 would be $1.25 in this example.

Receipts

At the end of the experiment you will learn which rounds have been selected for payment. After you learn which rounds are selected please fill out your receipt based on your earnings from the chosen rounds, plus your $5 participation stipend. The computer will assist you in this calculation. If you have a question at any time, please raise your hand and an experimenter will come over to assist you.