Supplemental Materials for the Asymmetric Public Goods Game

This file contains materials needed to run the asymmetric public goods game, referred to as the “tokens game” in the materials. The first two pages following this one are the player worksheets for the game. They assume an eight round game, in which the students play symmetrically (6 tokens each) for four rounds, and then play asymmetrically (either 10 or 2 tokens) for four rounds. In the last round students are not informed of the number of tokens they get prior to making their decisions. There are two versions of the worksheet, one for players who get 10 tokens in the later rounds, one for players who get two. They can easily be modified to change the number of rounds and whether each round is symmetric or asymmetric. In this version, players either get 10 tokens for all four asymmetric rounds, or get 2 for all four, but one can change the worksheets so that players get 10 in some rounds and 2 in other rounds.

The third page contains decision sheets that allow the players to report their decisions to the experimenter.

The fourth page contains instructions for the players to read before the experiment begins. They are somewhat vague as to how the rule for dividing the group payoff will be established; this is to allow instructors leeway in how that is done, or in changing it from round to round. You may wish to revise the instructions to be more specific about how this will be done in your class. Also you should add instructions on how payoffs will affect each student’s compensation at the end of the experiment (if any), depending on the method you use to compensate them.

**Tokens Game Worksheet**

Your name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| --- | --- | --- | --- | --- | --- | --- |
| Round | Tokens you are given | Tokens you allocate to the group account | Tokens you allocate to the private account | Group accountpayoff (announced) | Private account payoff(3 per token) | Total payoff |
| 1 | 6 |  |  |  |  |  |
| 2 | 6 |  |  |  |  |  |
| 3 | 6 |  |  |  |  |  |
| 4 | 6 |  |  |  |  |  |
| 5 | 10 |  |  |  |  |  |
| 6 | 10 |  |  |  |  |  |
| 7 | 10 |  |  |  |  |  |
| 8 | ? |  |  |  |  |  |

**Tokens Game Worksheet**

Your name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| --- | --- | --- | --- | --- | --- | --- |
| Round | Tokens you are given | Tokens you allocate to the group account | Tokens you allocate to the private account | Group accountpayoff (announced) | Private account payoff(3 per token) | Total payoff |
| 1 | 6 |  |  |  |  |  |
| 2 | 6 |  |  |  |  |  |
| 3 | 6 |  |  |  |  |  |
| 4 | 6 |  |  |  |  |  |
| 5 | 2 |  |  |  |  |  |
| 6 | 2 |  |  |  |  |  |
| 7 | 2 |  |  |  |  |  |
| 8 | ? |  |  |  |  |  |
| **Tokens Experiment Decision Reporting Sheet**I choose to allocate \_\_\_\_\_\_ of my tokens to the group account, and \_\_\_\_\_\_ of my tokens to the private account.**Be sure that the number of tokens you allocate to both accounts adds up to the number of tokens you have for this round, which is shown on your worksheet.** |

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**Instructions for the Tokens Game**

In this game, you will be given a number of hypothetical “tokens” and asked to choose how they should be allocated. They can be allocated into a group account or into a private account. Every token you allocate to the group account produces a payoff of 4 “ecus”, which is divided among all students in the class in a way that will be determined at the start of each round. For example, if the group account payoff is divided equally among all students, and there are 20 students in the class, each token allocated to the group account would produce a payoff of 0.2 ecus for each student. The group account payoff may be divided in different ways; you will be told what the division rule will be before you make your decision about how to allocate your tokens. Every token you allocate to the private account produces a payoff of 3 ecus, which goes only to you, and this is true in every round. Your total payoff thus depends on the number of tokens you allocate to each account, and also to the number of tokens that other players allocate to the group account and the rule for dividing the group account payoff. Specifically, your payoff is given by:

Payoff = (number of tokens you allocate to the private account) \* 3 +
 (your share of the payoff from the group account)

You have been given a worksheet to record your payoffs, and a set of decision sheets to inform the experimenter of your decision. The game is played in a series of rounds. The worksheet shows how many tokens you have been given in each round; the number may change from round to round.

At the start of each round, the instructor will announce the way in which the return to the group account will be divided; in some rounds there will be discussion among the class about how this should be done before a decision is reached, in other rounds it may simply be announced.

Once the division rule has been announced, look on the worksheet to see the number of tokens you have been given, and decide how many to allocate to the group account and how many to allocate to the private account. Record these numbers on your decision sheet and on your worksheet. Hand your decision sheet to the instructor when asked to do so. The information you record will be kept confidential and not be shared with the other students in the game.

After all the decision sheets for that round have been collected, the instructor will announce the payoff from the group account. Record this on your worksheet. Then record your private account payoff (which is 3 times the number of tokens you allocated) and record your total payoff, which is the sum of the group account payoff and the private account payoff.

(Each instructor should add details about the incentive mechanism he or she provides: cash payment to each player or a randomly selected player, prize for one or more high-scoring players, bonus points, or whatever reward he or she may choose to offer.)