## General Information

Thank you for being part of our research. You will be participating in a study of labor markets. If you read these instructions carefully you may earn a significant sum of money.

Each of you will be randomly assigned to one of two groups: "Managers" and "Employees." Whether you are a manager or employee is noted at the top of your record sheet.

Each market period will have three stages:

- Stage 1: Each manager assigns a wage to an employee. The manager records the wage assigned to his or her employee on the record sheet provided. A monitor will record the wage chosen by each manager.
- Stage 2: The monitor will record (on the employee's record sheet) the wages received by the employee. The employee then chooses the amount of work to provide.
- Stage 3: The monitor informs each manager about the amount of work provided by his or her employee.

As an employee, your income depends on the wage received less the cost of the amount of work provided. As a manager, your income depends on the wages paid and the amount of work provided. Details for computing employee and managers earnings will be provided.

Please record (on your record sheet) the wage in each period and the amount of work chosen. After recording this information you will then calculate the income you have earned. Once everyone has calculated and recorded their income, the first period of the labor market will be over. Over the course of the session, you will not be matched more than twice with the same person and you will never be paired with the same person for
two consecutive periods. In addition, you will not know with whom you have been matched in any of the periods. Your total income for participating in this market will be the sum of the earnings in each of the fifteen periods.

## How the Labor Market Works

1. At the beginning of each period we will open the labor market. In Stage 1 each manager chooses a wage for his or her employee and records the wage on the record sheet. Employees must accept the wage they have been assigned, forming a labor contract with the manager.
2. A monitor will write the wage given to each employee on his or her record sheet.

## 3. No manager will know the identity of the employee with whom $\mathrm{s} / \mathrm{he}$ has been paired, and no employee will know the identity of the manager.

4. After all wages have been communicated to each employee Stage 2 begins. Employees choose an amount of work to provide and record it on the record sheet.
5. In Stage 3 a monitor will write the amount of work provided on the manager's record sheet. Both managers and employees can then compute the earnings for the period.
Employees should not tell anyone what amount of work they have chosen and managers should not tell anyone about the work level of their employees.

## How Do Employees Calculate Their Income in Each Period?

1. From the wage received you must subtract out the costs of the amount of work you provide.
2. You determine the amount of work by choosing a number between 1 and 10 from the schedule below. The lowest amount of work you can choose is 1,2 is a slightly higher amount, and so on up to 10 , which is the highest amount.
3. The higher the amount of work that you choose, the better it is for the manager. That is, the higher the number you choose the higher the manager's income.
4. The higher the amount of work you choose, the higher your work-related costs. You can see how these costs are related to amount of work by looking at the schedule below.

Figure 1: Work-Cost Schedule

| Amount of Work | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Cost | 0 | 1 | 2 | 4 | 6 | 8 | 10 | 13 | 16 | 20 |

5. Your income in Experimental Dollars will be determined by the following formula:
Income = Wage - Cost of Amount of Work Provided

## How Do Managers Calculate their Income in Each Period?

1. Each manager begins each period with 100 "offer notes" from which to pay wages to an employee. When a manager chooses a wage, those offer notes are given to the employee. The remaining offer notes are converted into Manager Income according to the following formula:

Manager's Income = ( 100 - wage paid $) \times 0.2)+(8 \times$ Amount of Work Provided by the Employee)

## Practice Exercises

Employee's Income = Wage $\boldsymbol{-}$ Cost of Amount of Work Provided
Manager's Income $=((100-$ wage $) X 0.2)+(8 \times$ Amount of Work Provided by the Employee $)$

| Work-Cost Schedule |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Amount of Work 1 2 3 4 5 6 7 8 9 <br> 10          <br> Cost 0 1 2 4 6 8 10 13 16 <br> 20          |

1. Assume that a manager, who has 100 offer notes, assigns a wage of 80 experimental dollars to the employee. At the second stage of the period, the employee chooses an amount of work of 2.

What is the income for the employee and for the manager?
Employee's Income = $\qquad$ Experimental dollars
Manager’s Income $\qquad$ Experimental dollars
2. Assume again that a manager assigns a wage of 80 to the employee. At the second stage of the period, the employee chooses an amount of work of 5.

What is the income for the employee and for the manager?

| Employee's Income $=\ldots$ | Experimental dollars |
| :--- | :--- |
| Manager's Income $=\_$ | Experimental dollars |

3. Assume that a manager, who has 100 offer notes, assigns a wage of 20 experimental dollars to the employee. At the second stage of the period, the employee chooses an amount of work of 8 .

What is the income for the employee and for the manager?
Employee's Income = $\qquad$ Experimental dollars

Manager's Income $=\ldots$ Experimental dollars
4. Assume again that a manager assigns a wage of 20 to the employee. At the second stage of the period, the employee chooses an amount of work of 1.

What is the income for the employee and for the manager?

| Employee's Income $=\ldots$ | Experimental dollars |
| :--- | :--- |
| Manager's Income $=\ldots$ | Experimental dollars |

During the experiment your income will be calculated in "Experimental dollars," which will be converted into real dollars at the rate of:

$$
25 \text { Experimental Dollars = \$1 }
$$

In addition, you will receive a $\$ 5$ payment for showing up for the experiment on time.

There will be a total of 15 market periods. Your total earnings for participating in the experiment will be the sum of your earnings in each of the fifteen market periods plus the $\$ 5$ participation fee. You will be paid privately at the conclusion of the experiment.

Are there any questions?

# EMPLOYEE RECORD SHEET 

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Employee's Income = Wage $\boldsymbol{-}$ Cost of Amount of Work Provided
Work-Cost Schedule

| Amount of Work | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Cost | 0 | 1 | 2 | 4 | 6 | 8 | 10 | 13 | 16 | 20 |

## Period 1

Your Wage $\qquad$ Your Work Amount $\qquad$
Your earnings for Period 1 $\qquad$

## Period 2

Your Wage $\qquad$ Your Work Amount $\qquad$
Your earnings for Period 2 $\qquad$

## Period 3

Your Wage $\qquad$ Your Work Amount $\qquad$
Your earnings for Period 3 $\qquad$

## Period 4

Your Wage $\qquad$ Your Work Amount $\qquad$
Your earnings for Period 4 $\qquad$

## Period 5

Your Wage $\qquad$ Your Work Amount $\qquad$
Your earnings for Period 5 $\qquad$

## Period 6

Your Wage $\qquad$ Your Work Amount $\qquad$
Your earnings for Period 6 $\qquad$

## Period 7

Your Wage $\qquad$ Your Work Amount $\qquad$
Your earnings for Period 7 $\qquad$
$\qquad$

| Work-Cost Schedule |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Amount of Work 1 2 3 4 5 6 7 8 9 <br> 10          <br> Cost 0 1 2 4 6 8 10 13 16 <br> 20          |

## Period 8

Your Wage $\qquad$ Your Work Amount $\qquad$
Your earnings for Period 8 $\qquad$

## Period 9

Your Wage $\qquad$ Your Work Amount $\qquad$
Your earnings for Period 9 $\qquad$

## Period 10

Your Wage $\qquad$ Your Work Amount $\qquad$
Your earnings for Period 10 $\qquad$

## Period 11

Your Wage $\qquad$ Your Work Amount $\qquad$
Your earnings for Period 11 $\qquad$

## Period 12

Your Wage $\qquad$ Your Work Amount $\qquad$
Your earnings for Period 12 $\qquad$

## Period 13

Your Wage $\qquad$ Your Work Amount $\qquad$
Your earnings for Period 13 $\qquad$

## Period 14

Your Wage $\qquad$ Your Work Amount $\qquad$
Your earnings for Period 14 $\qquad$

## Period 15

Your Wage $\qquad$ Your Work Amount $\qquad$
Your earnings for Period 15 $\qquad$

## MANAGER RECORD SHEET

Manager's Income $=((100$ - wage $) X 0.2)+(8 \times$ Amount of Work Provided by the Employee $)$

## Period 1

Wage Paid $\qquad$ Amount of Work $\qquad$
Your earnings for Period 1 $\qquad$
Period 2
Wage Paid $\qquad$ Amount of Work $\qquad$
Your earnings for Period 2 $\qquad$

## Period 3

Wage Paid $\qquad$ Amount of Work $\qquad$
Your earnings for Period 3 $\qquad$

## Period 4

Wage Paid $\qquad$ Amount of Work $\qquad$
Your earnings for Period 4 $\qquad$

## Period 5

Wage Paid $\qquad$ Amount of Work $\qquad$
Your earnings for Period 5 $\qquad$
Period 6 Wage Paid $\qquad$ Amount of Work $\qquad$
Your earnings for Period 6 $\qquad$

## Period 7

Wage Paid $\qquad$ Amount of Work $\qquad$
Your earnings for Period 7 $\qquad$
$\qquad$

Manager's Income = ((100 - wage) X 0.2)+ (8 X Amount of Work Provided by the Employee)

## Period 8

Wage Paid $\qquad$ Amount of Work $\qquad$

Your earnings for Period 8 $\qquad$

## Period 9

Wage Paid $\qquad$ Amount of Work $\qquad$
Your earnings for Period 9 $\qquad$

## Period 10

Wage Paid $\qquad$ Amount of Work $\qquad$
Your earnings for Period 10 $\qquad$
Period 11
Wage Paid $\qquad$ Amount of Work $\qquad$

Your earnings for Period 11 $\qquad$
Period 12
Wage Paid $\qquad$ Amount of Work $\qquad$

Your earnings for Period 12 $\qquad$

## Period 13

Wage Paid $\qquad$ Amount of Work $\qquad$
Your earnings for Period 13 $\qquad$

## Period 14

Wage Paid $\qquad$ Amount of Work $\qquad$
Your earnings for Period 14 $\qquad$

## Period 15

Wage Paid $\qquad$ Amount of Work $\qquad$

Your earnings for Period 15 $\qquad$

