ELECTRONIC SUPPLEMENTARY MATERIAL
Detecting Motives for Cooperation in Public Goods Experiments

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Instruction in the *H* condition

Instructions

Outline of the Experiment

In this experiment, you will work **in pairs**. Your partner will be selected by computer and **will not be changed throughout the experiment**. You will not know who your partner is, either during or after the experiment.

You will be allocated 24 tokens in each round. Although you will not receive actual tokens, please imagine you have 24 tokens. You need to decide how many tokens to invest (between 0 and 24). Your payoff in each round depends on the number of tokens you invest (your "investment amount") and on the number your partner invests. This process will continue **for 20 rounds in a sequence**.

Your payoff is indicated in the Payoff Table. **All participants will receive the same Payoff Table**. In other words, your partner's Payoff Table is the same as yours.

Your earnings will be calculated as follows: the sum of your payoffs over the 20 rounds × 0.05.

Please note that you are NOT allowed to communicate with others during the experiment, except to ask questions of the experimenters. If you violate this rule, we will cancel the experiment immediately.

Please check that you have the following items on your desk:
- Instructions (this sheet)
- Writing materials
- A Payoff Table (for practice)
- A Record Sheet (for practice)

Explanation of the Experiment

This experiment consists of **3 practice rounds** and the **20 rounds of the experiment**. Your partner will be selected randomly from the participants and will not be changed throughout the experiment. You will not know who your partner is, either during or after the experiment.

You need to decide on an investment amount between 0 and 24 using the Payoff Table. All participants will decide how much to invest at the same time. Therefore, **you will not know how much your partner has invested at this point**. **All participants are given the same Payoff Table**.

First, you will enter your investment amount on the computer. Then, on the Record Sheet, write down why

you chose this amount in the "Reason for investment" column, and the amount you chose to invest in the "My investment" column. Once all participants have entered their investments on the computer, the results will be shown on the screen. Please fill in "Partner's investment" and "My payoff" on the Record Sheet. Note that your payoff is indicated in the Payoff Table.

This signals the end of the first round. **Your partner in the next round will be the same person**, and you will not know who this person is.

How to calculate your earnings
Your earnings are based on the sum of your payoffs in the actual experiment. Note that the practice rounds do not count towards your total payoff. Your earnings are calculated as follows:
Earnings = Sum of payoffs in the actual experiment × 0.05 (JPY)

For example, if your payoffs in the experiment add up to 99980, your earnings will be:
99980 × 0.05 = 4999 JPY
Note that numbers after a decimal point will be dropped.

The Payoff Table
Your payoff in the experiment is indicated in the Payoff Table. The Payoff Table shows how much your payoff will be, based on your investment and your partner's investment. The first row in the table shows your investment. The first column in the table indicates your partner's investment. For example, suppose you invest five tokens and your partner invests three tokens. You need to find the column corresponding to "5" and the row corresponding to "3." Your payoff will be in the block where these two lines intersect, in this case, "1895."

Practice

Please write down your "Subject number" and "Name" on your Record Sheet (for practice).

Decide how many tokens you would like to invest (any number between 0 and 24). Suppose you choose to invest 17 tokens. At this point, you do not know how much your partner has invested. Please write down "17" in the "My investment" column on the Record Sheet for the first round.

In the actual experiment, you will also enter your investment on the computer, but in the practice rounds, we will skip this process. In the actual experiment, you will write down the reason why you chose your investment in the "Reason for investment" column on the Record Sheet. For the practice rounds, please write "I will write down the reason for my choice" in this column.

Since all participants chose "17" as their investment, your partner's investment will be also "17." In the Payoff Table, find 17 in the first row (your investment) and 17 in the first column (your partner's investment).

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Your payoff is the value where the two lines intersect, in this case, "3091." Please write down "17" in the "Partner's investment" column and "3091" in the "My payoff" column on the Record Sheet for the first round.

Payoff Table (for practice)

your investment

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	1460	1500	1540	1580	1619	1659	1698	1736	1775	1812	1850	1886	1922	1957	1991	2025	2057	2089	2119	2149	2177	2204	2229	2253	2276
1	1540	1580	1620	1659	1699	1738	1776	1815	1852	1890	1926	1962	1997	2031	2065	2097	2129	2159	2189	2217	2244	2269	2293	2316	2338
2	1620	1660	1699	1739	1778	1816	1855	1892	1930	1966	2002	2037	2071	2105	2137	2169	2199	2229	2257	2284	2309	2333	2356	2378	2397
3	1700	1739	1779	1818	1856	1895	1932	1970	2006	2042	2077	2111	2145	2177	2209	2239	2269	2297	2324	2349	2373	2396	2418	2437	2455
4	1779	1819	1858	1896	1935	1972	2010	2046	2082	2117	2151	2185	2217	2249	2279	2309	2337	2364	2389	2413	2436	2458	2477	2495	2512
5	1859	1898	1936	1975	2012	2050	2086	2122	2157	2191	2225	2257	2289	2319	2349	2377	2404	2429	2453	2476	2498	2517	2535	2552	2566
6	1938	1976	2015	2052	2090	2126	2162	2197	2231	2265	2297	2329	2359	2389	2417	2444	2469	2493	2516	2538	2557	2575	2592	2606	2619
7	2016	2055	2092	2130	2166	2202	2237	2271	2305	2337	2369	2399	2429	2457	2484	2509	2533	2556	2578	2597	2615	2632	2646	2659	2670
8	2095	2132	2170	2206	2242	2277	2311	2345	2377	2409	2439	2469	2497	2524	2549	2573	2596	2618	2637	2655	2672	2686	2699	2710	2719
9	2172	2210	2246	2282	2317	2351	2385	2417	2449	2479	2509	2537	2564	2589	2613	2636	2658	2677	2695	2712	2726	2739	2750	2759	2766
10	2250	2286	2322	2357	2391	2425	2457	2489	2519	2549	2577	2604	2629	2653	2676	2698	2717	2735	2752	2766	2779	2790	2799	2806	2811
11	2326	2362	2397	2431	2465	2497	2529	2559	2589	2617	2644	2669	2693	2716	2738	2757	2775	2792	2806	2819	2830	2839	2846	2851	2854
12	2402	2437	2471	2505	2537	2569	2599	2629	2657	2684	2709	2733	2756	2778	2797	2815	2832	2846	2859	2870	2879	2886	2891	2894	2895
13	2477	2511	2545	2577	2609	2639	2669	2697	2724	2749	2773	2796	2818	2837	2855	2872	2886	2899	2910	2919	2926	2931	2934	2935	2933
14	2551	2585	2617	2649	2679	2709	2737	2764	2789	2813	2836	2858	2877	2895	2912	2926	2939	2950	2959	2966	2971	2974	2975	2973	2969
15	2625	2657	2689	2719	2749	2777	2804	2829	2853	2876	2898	2917	2935	2952	2966	2979	2990	2999	3006	3011	3014	3015	3013	3009	3003
16	2697	2729	2759	2789	2817	2844	2869	2893	2916	2938	2957	2975	2992	3006	3019	3030	3039	3046	3051	3054	3055	3053	3049	3043	3034
17	2769	2799	2829	2857	2884	2909	2933	2956	2978	2997	3015	3032	3046	3059	3070	3079	3086	3091	3094	3095	3093	3089	3083	3074	3063
18	2839	2869	2897	2924	2949	2973	2996	3018	3037	3055	3072	3086	3099	3110	3119	3126	3131	3134	3135	3133	3129	3123	3114	3103	3089
19	2909	2937	2964	2989	3013	3036	3058	3077	3095	3112	3126	3139	3150	3159	3166	3171	3174	3175	3173	3169	3163	3154	3143	3129	3113
20	2977	3004	3029	3053	3076	3098	3117	3135	3152	3166	3179	3190	3199	3206	3211	3214	3215	3213	3209	3203	3194	3183	3169	3153	3134
21	3044	3069	3093	3116	3138	3157	3175	3192	3206	3219	3230	3239	3246	3251	3254	3255	3253	3249	3243	3234	3223	3209	3193	3174	3152
22	3109	3133	3156	3178	3197	3215	3232	3246	3259	3270	3279	3286	3291	3294	3295	3293	3289	3283	3274	3263	3249	3233	3214	3192	3168
23	3173	3196	3218	3237	3255	3272	3286	3299	3310	3319	3326	3331	3334	3335	3333	3329	3323	3314	3303	3289	3273	3254	3232	3208	3180
24	3236	3258	3277	3295	3312	3326	3339	3350	3359	3366	3371	3374	3375	3373	3369	3363	3354	3343	3329	3313	3294	3272	3248	3220	3190

(your partner's investment — row labels on left)

Now we move on to the second practice round. Suppose you choose "17" for your investment amount, just as you did in the first round. Please write down "17" in the "My investment" column and "I will write down the reason for my choice" in the "Reason for investment" column on the Record Sheet. Now, suppose your partner decides to invest four tokens. In this case, your payoff is 2364. Please write down "4" in the "Partner's investment" column and "2364" in the "My payoff" column on the Record Sheet.

Let us move on to the third and last practice round. Here, we will suppose that you choose to invest five tokens. Please write down "5" in the "My investment" column and "I will write down the reason for my choice" in the "Reason for investment" column on the Record Sheet. In this round, your partner invests 18 tokens, so your payoff is 2973. Please write down "18" in the "Partner's investment" column and "2973" in the "My payoff" column on the Record Sheet.

The sum of your payoffs is 3091 + 2364 + 2973 = 8428. Please write down "8428" in the "Sum of payoffs"

column. Your earnings are calculated as follows:

Earnings = Sum of payoffs in the actual experiment × 0.05 (JPY)

$8428 \times 0.05 = 421.4 \approx 421$ JPY

In the actual experiment, we will calculate your earnings based on the total of the "My payoff" column over the 20 rounds.

If you have any questions, please raise your hand.

The Experiment

First, please put the Payoff Table (for practice) and the Record Sheet (for practice) in the envelope beside the desk. We will give you a different envelope containing the Payoff Table and the Record Sheet for the actual experiment. Please remove the documents from the envelope, and check that you have both the Payoff Table and Record Sheet. Next, take about 10 minutes to review the rules of the experiment, as well as how to read the Payoff Table.

All participants are given the same Payoff Table. Your partner will not be changed throughout the experiment, and you will not know who your partner is, either during or after the experiment.

If you have any questions, please raise your hand. One of us will come to you to answer your question. Please remember that you are NOT allowed to communicate with the other participants.

Please follow our (the experimenter's) instructions from now on.

Remember, your payoff depends on your investment and your partner's investment. You can find the relevant values in the Payoff Table. In the practice rounds, the values in the table are calculated using the following formula:

Your payoff = 500 +

$$\frac{\left\{(24 - \text{your invest amount}) \times 0.5 + (\text{your invest amount} + \text{partner's invest amount}) + (\text{your invest amount} + \text{partner's invest amount})^3 \times 0.00013\right\}}{0.0125}$$

For example, when you invest eight tokens and your partner invests 10 tokens, your payoff is 2519. Results are rounded off to the nearest whole number.

$$\text{Your payoff} = \frac{\left\{(24 - 8) \times 0.5 + (8 + 10) + (8 + 10)^3 \times 0.00013\right\}}{0.0125} + 500 \approx 2519$$

In the actual experiment, the values in the Payoff Table are calculated using the following formula:

$$\text{Your payoff} = \frac{(24 - \text{your invest amount}) + (\text{your invest amount} + \text{partner's invest amount}) \times 0.7}{0.006024}$$

Instruction in the *C* condition

Instructions

Outline of the Experiment

In this experiment, **your partner will be a computer**.

You will be allocated 24 tokens in each round. Although you will not receive actual tokens, please imagine you have 24 tokens. You need to decide how many tokens to invest (between 0 and 24). Your payoff in each round depends on the number of tokens you invest (your "investment amount") and on the number your partner invests. This process will continue **for 20 rounds in a sequence**. **We will inform you of the computer's invest amount for the 20 rounds before we start the experiment**. Therefore, your decision on how much to invest will not affect the computer's decision.

Your payoff is indicated in the Payoff Table. **All participants will receive the same Payoff Table**.

Your earnings will be calculated as follows: the sum of your payoffs over the 20 rounds × 0.05.

Please note that you are NOT allowed to communicate with others during the experiment, except to ask questions of the experimenters. If you violate this rule, we will cancel the experiment immediately.

Please check that you have the following items on your desk:
- Instructions (this sheet)
- Writing materials
- A Payoff Table (for practice)
- A Record Sheet (for practice)

Explanation of the Experiment

This experiment consists of **3 practice rounds** and the **20 rounds of the experiment**. Your partner will be a computer.

You need to decide on an investment amount between 0 and 24 using the Payoff Table. **The computer's investment is already filled in the "Partner's investment" on the Record Sheet**. **All participants are given the same Payoff Table.**

First, you will enter your investment amount on the computer. Then, on the Record Sheet, write down why you chose this amount in the "Reason for investment" column, and the amount you chose to invest in the "My investment" column. Once all participants have entered their investments on the computer, the results

will be shown on the screen. Please fill in "Partner's investment" and "My payoff" on the Record Sheet. Note that your payoff is indicated in the Payoff Table.

This signals the end of the first round. **Your partner in the next round will again be the computer**.

How to calculate your earnings
Your earnings are based on the sum of your payoffs in the actual experiment. Note that the practice rounds do not count towards your total payoff. Your earnings are calculated as follows:
Earnings = Sum of payoffs in the actual experiment × 0.05 (JPY)

For example, if your payoffs in the experiment add up to 99980, your earnings will be:
99980 × 0.05 = 4999 JPY
Note that numbers after a decimal point will be dropped.

The Payoff Table
Your payoff in the experiment is indicated in the Payoff Table. The Payoff Table shows how much your payoff will be, based on your investment and your partner's investment. The first row in the table shows your investment. The first column in the table indicates your partner's investment. For example, suppose you invest five tokens and your partner invests three tokens. You need to find the column corresponding to "5" and the row corresponding to "3." Your payoff will be in the block where these two lines intersect, in this case, "1895."

Practice

Please write down your "Subject number" and "Name" on your Record Sheet (for practice).

Decide how many tokens you would like to invest (any number between 0 and 24). The computer will automatically choose "17," as indicated in the "Partner's investment" column for the first round on the Record Sheet. Suppose you choose to invest 17 tokens. Please write down "17" in the "My investment" column on the Record Sheet for the first round.

In the actual experiment, you will also enter your investment on the computer, but in the practice rounds, we will skip this process. In the actual experiment, you will write down the reason why you chose your investment in the "Reason for investment" column on the Record Sheet. For the practice rounds, please write "I will write down the reason for my choice" in this column.

Both you and the computer chose "17" as the investment. In the Payoff Table, find 17 in the first row (your investment) and 17 in the first column (your partner's investment). Your payoff is the value where the two lines intersect, in this case, "3091." Please write down "3091" in the "My payoff" column on the Record Sheet for the first round.

Payoff Table (for practice)

your investment

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	1460	1500	1540	1580	1619	1659	1698	1736	1775	1812	1850	1886	1922	1957	1991	2025	2057	2089	2119	2149	2177	2204	2229	2253	2276
1	1540	1580	1620	1659	1699	1738	1776	1815	1852	1890	1926	1962	1997	2031	2065	2097	2129	2159	2189	2217	2244	2269	2293	2316	2338
2	1620	1660	1699	1739	1778	1816	1855	1892	1930	1966	2002	2037	2071	2105	2137	2169	2199	2229	2257	2284	2309	2333	2356	2378	2397
3	1700	1739	1779	1818	1856	1895	1932	1970	2006	2042	2077	2111	2145	2177	2209	2239	2269	2297	2324	2349	2373	2396	2418	2437	2455
4	1779	1819	1858	1896	1935	1972	2010	2046	2082	2117	2151	2185	2217	2249	2279	2309	2337	2364	2389	2413	2436	2458	2477	2495	2512
5	1859	1898	1936	1975	2012	2050	2086	2122	2157	2191	2225	2257	2289	2319	2349	2377	2404	2429	2453	2476	2498	2517	2535	2552	2566
6	1938	1976	2015	2052	2090	2126	2162	2197	2231	2265	2297	2329	2359	2389	2417	2444	2469	2493	2516	2538	2557	2575	2592	2606	2619
7	2016	2055	2092	2130	2166	2202	2237	2271	2305	2337	2369	2399	2429	2457	2484	2509	2533	2556	2578	2597	2615	2632	2646	2659	2670
8	2095	2132	2170	2206	2242	2277	2311	2345	2377	2409	2439	2469	2497	2524	2549	2573	2596	2618	2637	2655	2672	2686	2699	2710	2719
9	2172	2210	2246	2282	2317	2351	2385	2417	2449	2479	2509	2537	2564	2589	2613	2636	2658	2677	2695	2712	2726	2739	2750	2759	2766
10	2250	2286	2322	2357	2391	2425	2457	2489	2519	2549	2577	2604	2629	2653	2676	2698	2717	2735	2752	2766	2779	2790	2799	2806	2811
11	2326	2362	2397	2431	2465	2497	2529	2559	2589	2617	2644	2669	2693	2716	2738	2757	2775	2792	2806	2819	2830	2839	2846	2851	2854
12	2402	2437	2471	2505	2537	2569	2599	2629	2657	2684	2709	2733	2756	2778	2797	2815	2832	2846	2859	2870	2879	2886	2891	2894	2895
13	2477	2511	2545	2577	2609	2639	2669	2697	2724	2749	2773	2796	2818	2837	2855	2872	2886	2899	2910	2919	2926	2931	2934	2935	2933
14	2551	2585	2617	2649	2679	2709	2737	2764	2789	2813	2836	2858	2877	2895	2912	2926	2939	2950	2959	2966	2971	2974	2975	2973	2969
15	2625	2657	2689	2719	2749	2777	2804	2829	2853	2876	2898	2917	2935	2952	2966	2979	2990	2999	3006	3011	3014	3015	3013	3009	3003
16	2697	2729	2759	2789	2817	2844	2869	2893	2916	2938	2957	2975	2992	3006	3019	3030	3039	3046	3051	3054	3055	3053	3049	3043	3034
17	2769	2799	2829	2857	2884	2909	2933	2956	2978	2997	3015	3032	3046	3059	3070	3079	3086	3091	3094	3095	3093	3089	3083	3074	3063
18	2839	2869	2897	2924	2949	2973	2996	3018	3037	3055	3072	3086	3099	3110	3119	3126	3131	3134	3135	3133	3129	3123	3114	3103	3089
19	2909	2937	2964	2989	3013	3036	3058	3077	3095	3112	3126	3139	3150	3159	3166	3171	3174	3175	3173	3169	3163	3154	3143	3129	3113
20	2977	3004	3029	3053	3076	3098	3117	3135	3152	3166	3179	3190	3199	3206	3211	3214	3215	3213	3209	3203	3194	3183	3169	3153	3134
21	3044	3069	3093	3116	3138	3157	3175	3192	3206	3219	3230	3239	3246	3251	3254	3255	3253	3249	3243	3234	3223	3209	3193	3174	3152
22	3109	3133	3156	3178	3197	3215	3232	3246	3259	3270	3279	3286	3291	3294	3295	3293	3289	3283	3274	3263	3249	3233	3214	3192	3168
23	3173	3196	3218	3237	3255	3272	3286	3299	3310	3319	3326	3331	3334	3335	3333	3329	3323	3314	3303	3289	3273	3254	3232	3208	3180
24	3236	3258	3277	3295	3312	3326	3339	3350	3359	3366	3371	3374	3375	3373	3369	3363	3354	3343	3329	3313	3294	3272	3248	3220	3190

(your partner's investment — row labels on the left)

Now we move on to the second practice round. Suppose you choose "17" for your investment amount, just as you did in the first round. Please write down "17" in the "My investment" column and "I will write down the reason for my choice" in the "Reason for investment" column on the Record Sheet. The computer will automatically choose "4," as indicated in the "Partner's investment" column for the second round on the Record Sheet. This time your payoff is 2364. Please write down "2364" in the "My payoff" column for the second round on the Record Sheet.

Let us move on to the third and last practice round. Here, we will suppose that you choose to invest five tokens. Please write down "5" in the "My investment" column and "I will write down the reason for my choice" in the "Reason for investment" column on the Record Sheet. The computer will automatically choose "18," as indicated in the "Partner's investment" column for the third round on the Record Sheet. This time your payoff will be 2973. Please write down "2973" in the "My payoff" column on the Record Sheet.

The sum of your payoffs is 3091 + 2364 + 2973 = 8428. Please write down "8428" in the "Sum of payoffs" column. Your earnings are calculated as follows:

Earnings = Sum of payoffs in the actual experiment × 0.05 (JPY)

$8428 \times 0.05 = 421.4 \approx 421$ JPY

In the actual experiment, we will calculate your earnings based on the total of the "My payoff" column over

the 20 rounds.

If you have any questions, please raise your hand.

The Experiment

First, please put the Payoff Table (for practice) and the Record Sheet (for practice) in the envelope beside the desk. We will give you a different envelope containing the Payoff Table and the Record Sheet for the actual experiment. Please remove the documents from the envelope, and check that you have both the Payoff Table and Record Sheet. Next, take about 10 minutes to review the rules of the experiment, as well as how to read the Payoff Table.

In this experiment, your partner will be a computer. The computer will invest the number of tokens indicated in the "Partner's investment" column on the Record Sheet. Therefore, your decision will not affect the computer's decision.

If you have any questions, please raise your hand. One of us will come to you to answer your question. Please remember that you are NOT allowed to communicate with the other participants.

Please follow our (the experimenter's) instructions from now on.

Remember, your payoff depends on your investment and your partner's investment. You can find the relevant values in the Payoff Table. In the practice rounds, the values in the table are calculated using the following formula:

Your payoff $= 500 +$

$$\frac{\{(24 - \text{your invest amount}) \times 0.5 + (\text{your invest amount} + \text{partner's invest amount}) + (\text{your invest amount} + \text{partner's invest amount})^3 \times 0.00013\}}{0.0125}$$

For example, when you invest eight tokens and your partner invests 10 tokens, your payoff is 2519. Results are rounded off to the nearest whole number.

$$\text{Your payoff} = \frac{\{(24 - 8) \times 0.5 + (8 + 10) + (8 + 10)^3 \times 0.00013\}}{0.0125} + 500 \approx 2519$$

In the actual experiment, the values in the Payoff Table are calculated using the following formula:

$$\text{Your payoff} = \frac{(24 - \text{your invest amount}) + (\text{your invest amount} + \text{partner's invest amount}) \times 0.7}{0.006024}$$

Instruction in the *HC* condition

Instructions

Outline of the Experiment

This experiment involves 20 participants, divided into two groups, namely "Role A" and "Role B" (10 participants each). You will be allocated to one of the groups by lottery before the experiment, and **you will remain in the same group throughout the experiment.**

In this experiment, you will work **in pairs**. Your partner will be selected by computer and **will not be changed throughout the experiment**. You will not know who your partner is, either during or after the experiment. **Each pair consists of member from the Role A group and one member from the Role B group**.

Role A

Role A will be allocated 24 tokens in each round. Although you will not receive actual tokens, please imagine you have 24 tokens. Role A need to decide how many tokens to invest (between 0 and 24). Role A's payoff in each round depends on the number of tokens he/she invests (the "investment amount") and on the number invested by Role B.

Role B

Role B will also receive 24 tokens in each round. Although you will not receive actual tokens, please imagine you have 24 tokens. **Unlike Role A, Role B's decision on how much to invest will be made by computer**. Role B cannot affect the computer's decision. Role B's payoff depends on the computer's investment and on Role A's investment.

This process will continue **for 20 rounds in a sequence**. **We will inform both Role A and Role B of Role B's choice of investment for the 20 rounds, as decided by the computer, before the experiment**. Therefore, neither Role A nor B can affect the computer's decision.

Your payoff is indicated in the Payoff Table. **All participants (both Role A and B) will receive the same Payoff Table.** In other words, your partner's Payoff Table is the same as yours.

Your earnings will be calculated as follows: the sum of your payoffs over the 20 rounds $\times$ 0.05.

Please note that you are NOT allowed to communicate with others during the experiment, except to ask questions of the experimenters. If you violate this rule, we will cancel the experiment immediately.

Please check that you have the following items on your desk:

- Instructions (this sheet)
- Writing materials
- A Payoff Table (for practice)
- A Record Sheet A (for practice)
- A Record Sheet B (for practice)

Explanation of the Experiment

This experiment consists of **3 practice rounds** and the **20 rounds of the experiment**. Your partner will be selected randomly from the participants in the other group and will not be changed throughout the experiment. You will not know who your partner is, either during or after the experiment.

Role A

Role A will decide on an investment the invest amount between 0 and 24 using the Payoff Table. **Role B's investment, which is decided by the computer, is indicated in the "Partner's investment" column on the Record Sheet in advance**. **All participants (both Roles A and B) are given the same Payoff Table.**

First, Role A will enter his/her investment amount on the computer. Then, on the Record Sheet, he/she writes down the reason for choosing this amount in the "Reason for investment" column, and the amount invested in the "My investment" column. Once all participants have entered their investments on the computer, the results will be shown on the screen. Please fill the payoff in the "My payoff" column on the Record Sheet. Note that the payoff is indicated in the Payoff Table.

This signals the end of the first round. **Your partner in the next round will be the same person**, and you will not know who this person is. **Role B's decision on how much to invest will be made by computer**.

Role B

Role B's investment is decided by the computer. Please wait until Role A has made a decision. **Role B's investment is already filled in the "My investment" column on the Record Sheet..** The computer will make each investment in accordance with the amount in the column. **All participants (both Roles A and B) are given the same Payoff Table.**

When all participants of the Role A group finish entering their investments into the computer, the results will be shown on the screen. Role B must now fill in "Partner's investment" and "My payoff" on the Record Sheet. Note that your payoff is indicated in the Payoff Table.

This signals the end of the first round. **Your partners in the next round will be the same person**, and neither will know who the other person is.

How to calculate your earnings

Your earnings are based on the sum of your payoffs in the actual experiment. Note that the practice rounds do not count towards your total payoff. Your earnings are calculated as follows:

Earnings = Sum of payoffs in the actual experiment × 0.05 (JPY)

For example, if your payoffs in the experiment add up to 99980, your earnings will be:

99980 × 0.05 = 4999 JPY

Note that numbers after a decimal point will be dropped.

The Payoff Table

Your payoff in the experiment is indicated in the Payoff Table. The Payoff Table shows how much your payoff will be, based on your investment and your partner's investment. The first row in the table shows your investment. The first column in the table indicates your partner's investment. For example, suppose you invest five tokens and your partner invests three tokens. You need to find the column corresponding to "5" and the row corresponding to "3." Your payoff will be in the block where these two lines intersect, in this case, "1895."

Practice

We begin the practice assuming that you are assigned to Role A. Please write down your "Subject number" and "Name" on Record Sheet A (for practice).

Decide how many tokens you would like to invest (any number between 0 and 24). The computer will automatically choose "17" for Role B, as indicated in the "Partner's investment" column for the first round on the Record Sheet. Suppose you choose to invest 17 tokens. Please write down "17" in the "My investment" column on the Record Sheet for the first round.

In the actual experiment, you will also enter your investment on the computer, but in the practice rounds, we will skip this process. In the actual experiment, you will write down the reason why you chose your investment in the "Reason for investment" column on the Record Sheet. For the practice rounds, please write "I will write down the reason for my choice" in this column.

Both you and your partner chose "17" as the investment. In the Payoff Table, find 17 in the first row (your investment) and 17 in the first column (your partner's investment). Your payoff is the value where the two lines intersect, in this case, "3091." Please write down "3091" in the "My payoff" column on the Record Sheet for the first round.

Payoff Table (for practice)

your investment

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	1460	1500	1540	1580	1619	1659	1698	1736	1775	1812	1850	1886	1922	1957	1991	2025	2057	2089	2119	2149	2177	2204	2229	2253	2276
1	1540	1580	1620	1659	1699	1738	1776	1815	1852	1890	1926	1962	1997	2031	2065	2097	2129	2159	2189	2217	2244	2269	2293	2316	2338
2	1620	1660	1699	1739	1778	1816	1855	1892	1930	1966	2002	2037	2071	2105	2137	2169	2199	2229	2257	2284	2309	2333	2356	2378	2397
3	1700	1739	1779	1818	1856	1895	1932	1970	2006	2042	2077	2111	2145	2177	2209	2239	2269	2297	2324	2349	2373	2396	2418	2437	2455
4	1779	1819	1858	1896	1935	1972	2010	2046	2082	2117	2151	2185	2217	2249	2279	2309	2337	2364	2389	2413	2436	2458	2477	2495	2512
5	1859	1898	1936	1975	2012	2050	2086	2122	2157	2191	2225	2257	2289	2319	2349	2377	2404	2429	2453	2476	2498	2517	2535	2552	2566
6	1938	1976	2015	2052	2090	2126	2162	2197	2231	2265	2297	2329	2359	2389	2417	2444	2469	2493	2516	2538	2557	2575	2592	2606	2619
7	2016	2055	2092	2130	2166	2202	2237	2271	2305	2337	2369	2399	2429	2457	2484	2509	2533	2556	2578	2597	2615	2632	2646	2659	2670
8	2095	2132	2170	2206	2242	2277	2311	2345	2377	2409	2439	2469	2497	2524	2549	2573	2596	2618	2637	2655	2672	2686	2699	2710	2719
9	2172	2210	2246	2282	2317	2351	2385	2417	2449	2479	2509	2537	2564	2589	2613	2636	2658	2677	2695	2712	2726	2739	2750	2759	2766
10	2250	2286	2322	2357	2391	2425	2457	2489	2519	2549	2577	2604	2629	2653	2676	2698	2717	2735	2752	2766	2779	2790	2799	2806	2811
11	2326	2362	2397	2431	2465	2497	2529	2559	2589	2617	2644	2669	2693	2716	2738	2757	2775	2792	2806	2819	2830	2839	2846	2851	2854
12	2402	2437	2471	2505	2537	2569	2599	2629	2657	2684	2709	2733	2756	2778	2797	2815	2832	2846	2859	2870	2879	2886	2891	2894	2895
13	2477	2511	2545	2577	2609	2639	2669	2697	2724	2749	2773	2796	2818	2837	2855	2872	2886	2899	2910	2919	2926	2931	2934	2935	2933
14	2551	2585	2617	2649	2679	2709	2737	2764	2789	2813	2836	2858	2877	2895	2912	2926	2939	2950	2959	2966	2971	2974	2975	2973	2969
15	2625	2657	2689	2719	2749	2777	2804	2829	2853	2876	2898	2917	2935	2952	2966	2979	2990	2999	3006	3011	3014	3015	3013	3009	3003
16	2697	2729	2759	2789	2817	2844	2869	2893	2916	2938	2957	2975	2992	3006	3019	3030	3039	3046	3051	3054	3055	3053	3049	3043	3034
17	2769	2799	2829	2857	2884	2909	2933	2956	2978	2997	3015	3032	3046	3059	3070	3079	3086	3091	3094	3095	3093	3089	3083	3074	3063
18	2839	2869	2897	2924	2949	2973	2996	3018	3037	3055	3072	3086	3099	3110	3119	3126	3131	3134	3135	3133	3129	3123	3114	3103	3089
19	2909	2937	2964	2989	3013	3036	3058	3077	3095	3112	3126	3139	3150	3159	3166	3171	3174	3175	3173	3169	3163	3154	3143	3129	3113
20	2977	3004	3029	3053	3076	3098	3117	3135	3152	3166	3179	3190	3199	3206	3211	3214	3215	3213	3209	3203	3194	3183	3169	3153	3134
21	3044	3069	3093	3116	3138	3157	3175	3192	3206	3219	3230	3239	3246	3251	3254	3255	3253	3249	3243	3234	3223	3209	3193	3174	3152
22	3109	3133	3156	3178	3197	3215	3232	3246	3259	3270	3279	3286	3291	3294	3295	3293	3289	3283	3274	3263	3249	3233	3214	3192	3168
23	3173	3196	3218	3237	3255	3272	3286	3299	3310	3319	3326	3331	3334	3335	3333	3329	3323	3314	3303	3289	3273	3254	3232	3208	3180
24	3236	3258	3277	3295	3312	3326	3339	3350	3359	3366	3371	3374	3375	3373	3369	3363	3354	3343	3329	3313	3294	3272	3248	3220	3190

(leftmost vertical label: your partner's investment)

Now we move on to the second practice round. Suppose you choose "17" for your investment amount, just as you did in the first round. Please write down "17" in the "My investment" column and "I will write down the reason for my choice" in the "Reason for investment" column on the Record Sheet. The computer will automatically choose "4" for Role B's investment, as indicated in the "Partner's investment" column for the second round on Record Sheet. This time your payoff is 2364. Please write down "2364" in the "My payoff" column for the second round on Record Sheet.

Let us move on to the third and last practice round. Here, we will suppose that you choose to invest five tokens. Please write down "5" in the "My investment" column and "I will write down the reason for my choice" in the "Reason for investment" column on the Record Sheet. The computer will automatically choose "18" for Role B's investment, as indicated in the "Partner's investment" column for the third round on the Record Sheet. This time your payoff is 2973. Please write down "2973" in the "My payoff" column on the Record Sheet.

Next, we assume that you are assigned to Role B. Please write down your "Name" on Record Sheet B (for practice).

The computer will automatically choose "17" for your investment, as indicated in the "My investment" column for the first round on the Record Sheet. Suppose your partner (Role A) chooses "17." When you

invest "17" and your partner invests "17," your payoff is 3091. Please enter "17" in the "Partner's investment" column and "3091" in the "My payoff" column for the first round on the Record Sheet.

In the second round, the computer will automatically choose "17" for your investment, as indicated in the "My investment" column for the second round on the Record Sheet. Suppose your partner chooses "4." This time your payoff is 2364. Please write down "4" in the "Partner's investment" column and "2364" in the "My payoff" column for the second round on the Record Sheet.

In the third and last practice round, the computer automatically chooses "5" as your investment, as indicated in the "My investment" column for the third round on the Record Sheet. Suppose your partner chooses "18." This time your payoff is 2973. Please write down "5" in the "Partner's investment" column and "2973" in the "My payoff" column for the third round on the Record Sheet.

The sum of your payoffs is 3091 + 2364 + 2973 = 8428. Please write down "8428" in the "Sum of payoffs" column. Your earnings are calculated as follows:

Earnings = Sum of payoffs in the actual experiment × 0.05 (JPY)

$8428 \times 0.05 = 421.4 \approx 421$ JPY

In the actual experiment, we will calculate your earnings based on the total of the "My payoff" column over the 20 rounds.

If you have any questions, please raise your hand.

The Experiment

First, please put the Payoff Table (for practice) and the Record Sheets (for practice) in the envelope beside the desk.

Now we will assign you to either Role A or Role B by lottery. After that, we will move to the laboratory and give you a different envelope containing the Payoff Table and the Record Sheet for the actual experiment. Please remove the documents from the envelope, and check that you have both the Payoff Table and Record Sheet. Next, take about 10 minutes to review the rules of the experiment, as well as how to read the Payoff Table.

All participants are given the same Payoff Table. Your partner will not be changed throughout the experiment, and you will not know who your partner is, either during or after the experiment.

Those who are assigned to Role A will decide their investment amount by themselves. The computer will decide the investment amount for those assigned to Role B. The investment amount decided by the computer is indicated in the "Partner's investment" column on Record Sheet A and in the "My investment" column on Record Sheet B.

If you have any questions, please raise your hand. One of us will come to you to answer your question. Please remember that you are NOT allowed to communicate with the other participants.

Please follow our (the experimenter's) instructions from now on.

Remember, your payoff depends on your investment and your partner's investment. You can find the relevant values in the Payoff Table. In the practice rounds, the values in the table are calculated using the following formula:

Your payoff = 500 +

$$\frac{\left\{(24 - \text{your invest amount}) \times 0.5 + (\text{your invest amount} + \text{partner's invest amount}) + (\text{your invest amount} + \text{partner's invest amount})^3 \times 0.00013\right\}}{0.0125}$$

For example, when you invest eight tokens and your partner invests 10 tokens, your payoff is 2519. Results are rounded off to the nearest whole number.

$$\text{Your payoff} = \frac{\left\{(24 - 8) \times 0.5 + (8 + 10) + (8 + 10)^3 \times 0.00013\right\}}{0.0125} + 500 \approx 2519$$

In the actual experiment, the values in the Payoff Table are calculated using the following formula:

$$\text{Your payoff} = \frac{(24 - \text{your invest amount}) + (\text{your invest amount} + \text{partner's invest amount}) \times 0.7}{0.006024}$$

Payoff Table (for practice)

your investment

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	1460	1500	1540	1580	1619	1659	1698	1736	1775	1812	1850	1886	1922	1957	1991	2025	2057	2089	2119	2149	2177	2204	2229	2253	2276
1	1540	1580	1620	1659	1699	1738	1776	1815	1852	1890	1926	1962	1997	2031	2065	2097	2129	2159	2189	2217	2244	2269	2293	2316	2338
2	1620	1660	1699	1739	1778	1816	1855	1892	1930	1966	2002	2037	2071	2105	2137	2169	2199	2229	2257	2284	2309	2333	2356	2378	2397
3	1700	1739	1779	1818	1856	1895	1932	1970	2006	2042	2077	2111	2145	2177	2209	2239	2269	2297	2324	2349	2373	2396	2418	2437	2455
4	1779	1819	1858	1896	1935	1972	2010	2046	2082	2117	2151	2185	2217	2249	2279	2309	2337	2364	2389	2413	2436	2458	2477	2495	2512
5	1859	1898	1936	1975	2012	2050	2086	2122	2157	2191	2225	2257	2289	2319	2349	2377	2404	2429	2453	2476	2498	2517	2535	2552	2566
6	1938	1976	2015	2052	2090	2126	2162	2197	2231	2265	2297	2329	2359	2389	2417	2444	2469	2493	2516	2538	2557	2575	2592	2606	2619
7	2016	2055	2092	2130	2166	2202	2237	2271	2305	2337	2369	2399	2429	2457	2484	2509	2533	2556	2578	2597	2615	2632	2646	2659	2670
8	2095	2132	2170	2206	2242	2277	2311	2345	2377	2409	2439	2469	2497	2524	2549	2573	2596	2618	2637	2655	2672	2686	2699	2710	2719
9	2172	2210	2246	2282	2317	2351	2385	2417	2449	2479	2509	2537	2564	2589	2613	2636	2658	2677	2695	2712	2726	2739	2750	2759	2766
10	2250	2286	2322	2357	2391	2425	2457	2489	2519	2549	2577	2604	2629	2653	2676	2698	2717	2735	2752	2766	2779	2790	2799	2806	2811
11	2326	2362	2397	2431	2465	2497	2529	2559	2589	2617	2644	2669	2693	2716	2738	2757	2775	2792	2806	2819	2830	2839	2846	2851	2854
12	2402	2437	2471	2505	2537	2569	2599	2629	2657	2684	2709	2733	2756	2778	2797	2815	2832	2846	2859	2870	2879	2886	2891	2894	2895
13	2477	2511	2545	2577	2609	2639	2669	2697	2724	2749	2773	2796	2818	2837	2855	2872	2886	2899	2910	2919	2926	2931	2934	2935	2933
14	2551	2585	2617	2649	2679	2709	2737	2764	2789	2813	2836	2858	2877	2895	2912	2926	2939	2950	2959	2966	2971	2974	2975	2973	2969
15	2625	2657	2689	2719	2749	2777	2804	2829	2853	2876	2898	2917	2935	2952	2966	2979	2990	2999	3006	3011	3014	3015	3013	3009	3003
16	2697	2729	2759	2789	2817	2844	2869	2893	2916	2938	2957	2975	2992	3006	3019	3030	3039	3046	3051	3054	3055	3053	3049	3043	3034
17	2769	2799	2829	2857	2884	2909	2933	2956	2978	2997	3015	3032	3046	3059	3070	3079	3086	3091	3094	3095	3093	3089	3083	3074	3063
18	2839	2869	2897	2924	2949	2973	2996	3018	3037	3055	3072	3086	3099	3110	3119	3126	3131	3134	3135	3133	3129	3123	3114	3103	3089
19	2909	2937	2964	2989	3013	3036	3058	3077	3095	3112	3126	3139	3150	3159	3166	3171	3174	3175	3173	3169	3163	3154	3143	3129	3113
20	2977	3004	3029	3053	3076	3098	3117	3135	3152	3166	3179	3190	3199	3206	3211	3214	3215	3213	3209	3203	3194	3183	3169	3153	3134
21	3044	3069	3093	3116	3138	3157	3175	3192	3206	3219	3230	3239	3246	3251	3254	3255	3253	3249	3243	3234	3223	3209	3193	3174	3152
22	3109	3133	3156	3178	3197	3215	3232	3246	3259	3270	3279	3286	3291	3294	3295	3293	3289	3283	3274	3263	3249	3233	3214	3192	3168
23	3173	3196	3218	3237	3255	3272	3286	3299	3310	3319	3326	3331	3334	3335	3333	3329	3323	3314	3303	3289	3273	3254	3232	3208	3180
24	3236	3258	3277	3295	3312	3326	3339	3350	3359	3366	3371	3374	3375	3373	3369	3363	3354	3343	3329	3313	3294	3272	3248	3220	3190

your partner's investment

Payoff Table for the Actual Experiment

your investment

your partner's investment

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	3984	3934	3884	3835	3785	3735	3685	3635	3586	3536	3486	3436	3386	3337	3287	3237	3187	3137	3088	3038	2988	2938	2888	2839	2789
1	4100	4050	4001	3951	3901	3851	3801	3752	3702	3652	3602	3552	3503	3453	3403	3353	3303	3254	3204	3154	3104	3054	3005	2955	2905
2	4216	4167	4117	4067	4017	3967	3918	3868	3818	3768	3718	3669	3619	3569	3519	3469	3420	3370	3320	3270	3220	3171	3121	3071	3021
3	4333	4283	4233	4183	4133	4084	4034	3984	3934	3884	3835	3785	3735	3685	3635	3586	3536	3486	3436	3386	3337	3287	3237	3187	3137
4	4449	4399	4349	4299	4250	4200	4150	4100	4050	4001	3951	3901	3851	3801	3752	3702	3652	3602	3552	3503	3453	3403	3353	3303	3254
5	4565	4515	4465	4416	4366	4316	4266	4216	4167	4117	4067	4017	3967	3918	3868	3818	3768	3718	3669	3619	3569	3519	3469	3420	3370
6	4681	4631	4582	4532	4482	4432	4382	4333	4283	4233	4183	4133	4084	4034	3984	3934	3884	3835	3785	3735	3685	3635	3586	3536	3486
7	4797	4748	4698	4648	4598	4548	4499	4449	4399	4349	4299	4250	4200	4150	4100	4050	4001	3951	3901	3851	3801	3752	3702	3652	3602
8	4914	4864	4814	4764	4714	4665	4615	4565	4515	4465	4416	4366	4316	4266	4216	4167	4117	4067	4017	3967	3918	3868	3818	3768	3718
9	5030	4980	4930	4880	4831	4781	4731	4681	4631	4582	4532	4482	4432	4382	4333	4283	4233	4183	4133	4084	4034	3984	3934	3884	3835
10	5146	5096	5046	4997	4947	4897	4847	4797	4748	4698	4648	4598	4548	4499	4449	4399	4349	4299	4250	4200	4150	4100	4050	4001	3951
11	5262	5212	5163	5113	5063	5013	4963	4914	4864	4814	4764	4714	4665	4615	4565	4515	4465	4416	4366	4316	4266	4216	4167	4117	4067
12	5378	5329	5279	5229	5179	5129	5080	5030	4980	4930	4880	4831	4781	4731	4681	4631	4582	4532	4482	4432	4382	4333	4283	4233	4183
13	5495	5445	5395	5345	5295	5246	5196	5146	5096	5046	4997	4947	4897	4847	4797	4748	4698	4648	4598	4548	4499	4449	4399	4349	4299
14	5611	5561	5511	5461	5412	5362	5312	5262	5212	5163	5113	5063	5013	4963	4914	4864	4814	4764	4714	4665	4615	4565	4515	4465	4416
15	5727	5677	5627	5578	5528	5478	5428	5378	5329	5279	5229	5179	5129	5080	5030	4980	4930	4880	4831	4781	4731	4681	4631	4582	4532
16	5843	5793	5744	5694	5644	5594	5544	5495	5445	5395	5345	5295	5246	5196	5146	5096	5046	4997	4947	4897	4847	4797	4748	4698	4648
17	5959	5910	5860	5810	5760	5710	5661	5611	5561	5511	5461	5412	5362	5312	5262	5212	5163	5113	5063	5013	4963	4914	4864	4814	4764
18	6076	6026	5976	5926	5876	5827	5777	5727	5677	5627	5578	5528	5478	5428	5378	5329	5279	5229	5179	5129	5080	5030	4980	4930	4880
19	6192	6142	6092	6042	5993	5943	5893	5843	5793	5744	5694	5644	5594	5544	5495	5445	5395	5345	5295	5246	5196	5146	5096	5046	4997
20	6308	6258	6208	6159	6109	6059	6009	5959	5910	5860	5810	5760	5710	5661	5611	5561	5511	5461	5412	5362	5312	5262	5212	5163	5113
21	6424	6375	6325	6275	6225	6175	6125	6076	6026	5976	5926	5876	5827	5777	5727	5677	5627	5578	5528	5478	5428	5378	5329	5279	5229
22	6541	6491	6441	6391	6341	6292	6242	6192	6142	6092	6042	5993	5943	5893	5843	5793	5744	5694	5644	5594	5544	5495	5445	5395	5345
23	6657	6607	6557	6507	6458	6408	6358	6308	6258	6208	6159	6109	6059	6009	5959	5910	5860	5810	5760	5710	5661	5611	5561	5511	5461
24	6773	6723	6673	6624	6574	6524	6474	6424	6375	6325	6275	6225	6175	6125	6076	6026	5976	5926	5876	5827	5777	5727	5677	5627	5578