## Appendix E

## Game Tasks

This matrix (Table E.1) presents each task (T), the points of interest involved in the resolution of each (POI), the difficulty of the task, and the associated skill according to the PISA skill matrix (OECD, 2017).
The matrix for stage 1 was not considered because that is not related to a specific skill. However, the success of the players on stage 1 was stored in the log associated with a single task, which was specifically to analyse the indicators of the time and effort that it took each player to learn the basic mechanics.

Table E. 1
Task Matrix Stage 2-6

| Stage | Task (POI) | difficulty | Skill required |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Player 1 | Player 2 | Player3 |
|  | T1 (POI 2) |  | $1 A 2$ | A2 | A2 |
|  | T2 (POI 3.4) |  | $2 C 3$ | C3 | A3 |
|  | T3 (POI 5) |  | $2 A 3$ | A3 | A3 |
|  | T4(POI 6, 8,9,11,12) |  | $3 A-B 3$ | $A-B 3$ | $A-B 3$ |
|  | T5 (POI 7, 10, 13) |  | $2 C 3$ | C3 | C3 |
|  | T6 (POI 14) |  | 3 A3 | A3 | C3 |
|  | $T 7$ (POI 15,16,17) |  | $2 A-B 3$ | $A-B 3$ | $A-B 3$ |
|  | T8 (POI 18.19) |  | $4 B-C-D$ | $B-C-D$ | $B-C-D$ |
|  | T9 (POI 20.21) |  | 1 A3 | A3 | A3 |
| 3 | T1 (POI 0) |  | 1 A3 | A3 | A3 |
|  | T2 (POI 1-2) |  | 3 A1 A2 C | $C-D$ | to |
|  | T3 (POI 3) |  | $3 C-D$ | to | A1 A2 C |
|  | T4 (POI 4) |  | 3 A1 A2 C | $C-D$ | to |
|  | T5 (POI 5) |  | $3 C-D$ | to | A1 A2 C |
|  | T6 (POI 6) |  | $3 C-D$ | A1 A2 C | to |
|  | T7 (POI 7-9) |  | 4 A1 A2 C | to | $C-D$ |
|  | T8 (POI 10-14) |  | 3 A1 A2 C-D | A1 A2 C-D | A1 A2 C-D |
|  | T9 (POI 15) |  | 3 A1 A2 C-D | $C-D$ | to |
|  | T10 (POI 16) |  | 3 to | $C-D$ | $A 1 A 2 C-D$ |
|  | T11 (POI 17) |  | 3 to | A1 A2 C-D | $C-D$ |
|  | T12 (POI 18) |  | 3 to | $C-D$ | A1 A2 C-D |
|  | T13 (POI 19) |  | $3 C-D$ | $A 1 A 2 C-D$ | to |
|  | T14 (POI 20-21) |  | $2 C 1 C 3 D 3$ | A3 | A3 |
|  | T1 (POI 2-6) |  | $4 \mathrm{~A} 3 \mathrm{~B} C-\mathrm{D}$ | A3 B3 C-D | A3 B3 C-D |
|  | T2 (POI 7-8) |  | $5 B-C-D$ | $B-C-D$ | $B-C-D$ |


| T3 (POI 9-10) | $2 A 3$ | A3 | A3 |
| :---: | :---: | :---: | :---: |
| T4 (POI 19) | $6 A-B-C-D$ | $A-B-C-D$ | $A-B-C-D$ |
| T5 (POI 20-24) | $5 B-C-D$ | $B-C-D$ | $B-C-D$ |
| T6 (POI 25-28) | $5 A-B-C-D$ | $A-B-C-D$ | $A-B-C-D$ |
| 5 T2 (POI 1-2) | 3 A3 | A3 | A3 |
| T2 (POI 8-12) | $4 A-B-C-D$ | $A-B-C-D$ | $A-B-C-D$ |
| T3 (POI 13-16) | $5 A-B-C-D$ | $A-B-C-D$ | $A-B-C-D$ |
| T4 (POI 3-7) | $6 A-B-C-D$ | $A-B-C-D$ | $A-B-C-D$ |
| T5 (POI 17-31) | $7 A-B-C-D$ | $A-B-C-D$ | $A-B-C-D$ |
| T6 (POI 32-45) | $8 A-B-C-D$ | $A-B-C-D$ | $A-B-C-D$ |
| T7 (POI 46) | 3 A3 | A3 | A3 |
| 6 T2 (POI 1-2) | $3 A-B-C-D$ | $A-B-C-D$ | $A-B-C-D$ |
| T2 (POI 3, 21) | $5 A-B-C-D$ | $A-B-C-D$ | $A-B-C-D$ |
| T3 (POI 4-6) | $8 A-B-C-D$ | $A-B-C-D$ | $A-B-C-D$ |
| T4 (POI 7) | $7 A-B-C-D$ | $A-B-C-D$ | $A-B-C-D$ |
| T5 (POI 9-11) | $8 A-B-C-D$ | $A-B-C-D$ | $A-B-C-D$ |
| T6 (POI 12-16) | $8 A-B-C-D$ | $A-B-C-D$ | $A-B-C-D$ |
| T7 (POI 17-19) | $8 A-B-C-D$ | $A-B-C-D$ | $A-B-C-D$ |
| T8 (POI 22) | $6 A-B-C-D$ | $A-B-C-D$ | $A-B-C-D$ |

Note: T represent the task, POI refers to the point of interest, $A, B, C \& D$ refer to the complete row of problem-solving in the OECD framework.

