

Structure (The Fine Print)

- 1) Once the groups get to their assigned rooms, each participant takes one wristband and the group fills in the group's identification sheet.
- 2) Then, all groups will receive *pack 1*, a set with the first 34 problems. Also, they will receive the **answer sheet for all problems in all packs**.
- 3) Although there is only one answer sheet per group, there will be more than one copy of each problem in each pack. That way, multiple participants will be able to work on the same problem independently at the same time.
- 4) At any time, a group may hand in the answer sheet to the marking hub located at
CUSP Room, 5th Floor, BH (S)5.01
to have it checked. The number of points they get is equal to the number of correct answers. The markers **will not say** which problems are right, but solely how many. There are no half marks.
- 5) During the game, each correct problem is worth 1 point. The final scoring is more complicated and doesn't matter for getting access to *bonus tasks* or *chains*. For a detailed description of how the final scoring is done, please refer to *Scoring and Rules*.
- 6) Starred (★) problems are not worth more points than normal ones, neither during nor after the game. The stars are there to let you know that this problem might take a while to solve.
- 7) There is a limit of 10 checks per group. During the game, the reason for getting solutions marked is solely to get access to chains and bonus tasks. Once a group has access to a new chain or bonus task, there is no way to lose it, even if a subsequent marking gives the group fewer points. For the final result, however, is the last checking (not the better one) that counts.
- 8) Once 8 or more problems are solved, the group may receive the first clue for the first *chain*.
- 9) A *chain* is a mini treasure hunt, in which a clue leads to another one until the group finds the certificate of finishing the *chain*. Clues may be hidden around King's.
- 10) Clues may be fixed or removable. A fixed clue may be, for example, something written on a whiteboard or wall, whereas a removable clue is a piece of paper. For removable clues, there will be **one copy for each group**, properly identified with the group colour or name. Make sure to take **only** your group's clue.

- 11) *Chains* have around 4 or 5 clues each. After getting the certificate of accomplishment, the group must **hand in the certificate together with all removable clues of that chain** to the marking station. If a group has only partially completed a *chain* when Puzzled ends, this group may hand in all clues it has so far to receive the points for solving them.
- 12) Finishing a *chain* (first or second) gives the group access to a new pack of problems. The last two *chains* don't open a new pack of problems.
- 13) In total, there are 5 *chains*: **Neptune, Pluto, Jupiter, Mercury, and Uranus**.
- 14) There are 3 packs of problems. One given at the beginning of Puzzled and two to be earned after the two first chains are completed (you can complete them in any order).
- 15) The minimum number of points (or correct problems) necessary to receive the Clue 1 of each *chain* is given as follows:

1st chain	8 points
2nd chain	11 points
3rd chain	15 points
4th chain	25 points
5th chain	37 points

- 16) Depending on the result of a marking, a group may receive one or more tickets allowing it to participate in one or more *bonus tasks*. The participants must choose at the time of receiving the marking which bonus task ticket they would like (there is no particular order!). A *bonus task* is a challenge that can be attempted at anytime once the group has the ticket for it. There will be an organiser running the *bonus tasks* near the marking station. The number of participants per group and the name of each task is described on the left table. The table on the right lists the thresholds to get access to *bonus tasks*:

#	Bonus Task	Participants
1	Königsberg Bridge	up to 3
2	The Soma Cube	up to 3
3	Pyramids	1 or 2
4	Estimation	up to 3
5	Not Tetris	1 or 2
6	Queen's Problem	1 or 2
7	Domino Problem	1 or 2

Necessary # of points	
1st bonus task	5
2nd bonus task	10
3rd bonus task	12
4th bonus task	17
5th bonus task	23
6th bonus task	30
7th bonus task	40

- 17) Puzzled will end at 5.30pm regardless of how many problems or chains have been solved by then. At that time, groups shall hand in all the clues of ongoing *chains* together with the final version of their answer sheet. Note that this **final version is the one that counts** for the final scores, even if it has less correct problems than a previous one.
- 18) The winning team will be announced in **Bush House Auditorium** starting at **6pm**.

Scoring and Rules (The Fine Print)

PROBLEMS

- There will be 80 in total. They will be separated in three packs according to the table below:

Pack	# of Problems
1	34
2	23
3	23

- During the game, each correct answer is worth 1 point. These points are needed to open new *chains* and *bonus tasks*. However, once the game ends, the final marking will take in account how many groups got each problem right. This way, a problem that was been solved by only one or two groups will be worth more than a problem solved by many groups. See table below:

# of Groups that solved Problem k	Problem k is worth
1 to 3	5 final points
4 to 7	4 final points
8+	3 final points

- Each group can ask for their answer sheet to be market at most 10 times. The marker will not tell the group which problems are right, but just how many.

CHAINS

- There are five chains in total. Once a group gets necessary number of points (= correct problems) according to the table below, it can choose which of the available chains to begin.

1st chain	8 points
2nd chain	11 points
3rd chain	15 points
4th chain	25 points
5th chain	37 points

- Remember: only take clues identified with your group name or number.
- It will be clear when a *chain* ends. At this moment, the group should go to the marking station and hand in all the removable clues they got, including the certificate of accomplishment.

- After the game ends, the contribution to the final scoring from the chains will be calculated according to the following principles:
 - 1) All chains are worth the same, even if there are less clues in one than in the other.
 - 2) If a chain is worth c points, and there are n clues in that chain (clue 1, clue 2, ..., clue n) plus the certificate of accomplishment, each clue will score $c/(n + 2)$ points, whereas the certificate will be worth $2c/(n + 2)$.
 - 3) Let P be the average number of points (among all groups) obtained from problems in the final score. Then, $C = P$, where $C = 5c$. So, a group that completes all the chains will get as many points as the average score in problems.
 - 4) Note that in the case you ask the *marking hub* for a hint, your group won't get the points of that clue in particular. There is a limit of 3 hints per group for the whole game.

BONUS TASKS

- A *bonus task* is a challenge that can be attempted at any time once the group has the ticket for it. There will be an organiser running the *bonus tasks* near the marking station. The group shall send an appropriate number of its members to complete the task, and the name of each task is described on the left table. The table on the right lists the thresholds to get access to *bonus tasks*; a group may choose to do the *bonus tasks* in any order, for example, doing task 3 after having 5 points.

#	Bonus Task	Participants	Necessary # of points	
1	Königsberg Bridge	up to 3	1st bonus task	5
2	The Soma Cube	up to 3	2nd bonus task	10
3	Pyramids	1 or 2	3rd bonus task	12
4	Estimation	up to 3	4th bonus task	17
5	Not Tetris	1 or 2	5th bonus task	23
6	Queen's Problem	1 or 2	6th bonus task	30
7	Domino Problem	1 or 2	7th bonus task	40

- For the groups that successfully finish a bonus task, points will be added to these groups' final scores¹ as follows:

Classification of the group	Final Points
1st or 2nd	7
3rd to 5th	5
6th to 8th	4
9th+	3

¹Not to be used during the game to get access to chains or other bonus tasks!