

## PANACEA

STUDY GUIDE



12·13·14 SEPTEMBER

## Introduction:

Serving as a test for young biologists, this year Panacea aims to push delegates' resilience through unique, challenging, and thought-provoking tasks. Encompassing every facet of biological thinking, from a broad understanding of concepts to sharp observational skills and precise analytical reasoning, this category will ensure that only the most well-rounded teams can pave their way to success.

**Round 1:** 

**Delegate Count:** 2–3 **Duration:** 2 hours

This round will feature drawing, guessing, and finally solving a jigsaw puzzle. Strips of paper with various biological terms will be placed in a bowl. A member from each team will pick one strip and attempt to draw it on the board with a marker, without writing or speaking. All teams will have 30 seconds to guess the term (no negative marking for incorrect guesses and unlimited guesses allowed).

If no one can figure it out within the time limit, it is skipped, and no team gets points. If any team guesses correctly, they will receive points and a jigsaw piece for their puzzle, and the team of the delegate who drew will also receive points. To ensure fairness, buzzers will be utilised. Finally, delegates will have 2 minutes to arrange their pieces and guess what the jigsaw puzzle represents. Identifying the puzzle correctly awards points to the team.

Note: This is an accumulation round.

Round 2:

**Delegate Count:** 2–3

**Duration:** 3 hours

In this round, teams will step into a high-pressure medical scenario designed to feel like a real-life hospital emergency. Each team will receive five unique patient profiles, all requiring immediate attention. With only basic information (vitals, backstory, symptoms), they must make difficult choices: who to prioritise, who can wait, and who might not make it.

Each team will have 20 minutes to review their cases and must fill out an answer sheet along with providing a verbal explanation to the judges. Teams must also balance ethical reasoning and teamwork under pressure. Judging will be based on ethics, teamwork, and medical knowledge.

**Note:** This is an elimination round. Only the top 6 teams will advance to Round 3. Advancement will be decided based on the aggregate points total from Rounds 1 and 2.

Round 3:

**Delegate Count:** 2–3 **Duration:** 3 hours

The teams must invent a new biomedical device, therapy, diagnostic tool, or biotech solution for a real-world medical challenge within a limited time. At the start of the round, teams will randomly draw a "problem card" describing a healthcare issue. Their task is to invent a biomedical innovation that addresses that problem.

The delegates must prepare a short presentation (~3 minutes) explaining what their innovation is, how it works (biomedical basis), why it is effective, and any side effects or limitations. Teams may choose to design a simple visual diagram or model for better explanation. The most creative, feasible, and accessible design will be awarded the highest marks.

**Note:** Final decisions regarding the category, as well as potential changes are in the hands of the category heads.