Lahore Grammar School
Johar Town Senior Boys Campus

DAEDALUS'S APPRENTICE

STUDY GUIDE

12 · 13 · 14 SEPTEMBER

Introduction:

From the ancient myths of Greece comes the tale of Daedalus. In this category, delegates will step into the sandals of his apprentice, Icarus and face rigorous challenges that test their ingenuity, design skills and most importantly, their resilience under pressure. Across three rounds, only the most elegant and resourceful teams will rise to conquer this category.

Round 1:
Delegate Count: 3
Duration: 1 hour 30 minutes

Daedalus once found himself trapped within the Labyrinth of his own design, and now you'll join him too! This round challenges teams to solve a series of engineering-themed puzzles to "escape" within the time limit. Two teams will enter the room at once, with 4 puzzles/questions on either side. Teams must answer as many puzzles as possible in 7 minutes. Any unanswered question will receive 0 marks. The puzzles test mechanical understanding, logical deduction, and quick application of engineering principles.

Note: This is an accumulation round. Scores from this round will carry forward to Round 2 for qualification purposes.

Round 2:
Delegate Count: 2 – 3
Time taken for round: 1 hour 30 minutes

Having escaped the Labyrinth, teams are now tasked by the mighty King Minos to rebuild it, surpassing even the legendary creation of Daedalus. Each team will design and construct a tabletop 3D labyrinth model on an A2 cardboard base, complete with at least 3 mini functional traps.

The model must include:

- Walls with a height of 4–6 cm
- A clear start and finish
- A continuous, functional path allowing a marble to travel through
- Aesthetic appeal and strong build quality

Points will be awarded for functionality, aesthetics, and build quality, with bonus points for exceptional features.

Note: This is an elimination round. Qualification for Round 3 will be based on combined performance in Rounds 1 and 2.

Round 3:
Delegate Count: 3 – 4
Duration: 2 hours (construction) + 1 hour (launches)

Daedalus warned Icarus to fly neither too high nor too low, but ambition knows no bounds. In this final challenge, teams will design a non-propelled glider in 120 minutes using only the provided materials. The glider will be launched from a designated height and must land within the scoring zones to avoid penalties. Teams will receive two launch attempts, with the combined points from both determining their score. Distance, stability, and accuracy must all be balanced.

Note: Penalties will apply if the glider lands outside scoring zones or crashes. Performance in this round will carry the most weight in determining the final winner, but the highest scoring team in Round 3 will not necessarily be the champion. The overall winner will be decided based on cumulative performance across all three rounds, with each successive round carrying greater weightage. As a result, the highest scorer in the final round will not automatically be the winner. Category Heads reserve the right to make modifications to the rounds or rules if deemed necessary, and all final decisions will rest with them.