



Kinetic Quest

Physics is the language that governs motion, energy, and the unseen forces shaping our universe. In this arena, intuition must be backed by precision, and creativity must submit to laws that never bend. Every challenge demands more than formulas, it requires clarity of thought, careful observation, and the courage to test ideas under pressure. As the clock runs, only those who can model reality, reason through complexity, and apply theory with confidence will rise above the rest.

Round 1:

In this round, physics knowledge determines movement on the board. Teams will face a sequence of multiple-choice questions covering core physics concepts. A correct answer earns the team a turn to roll the dice and advance on the Snakes & Ladders board, while an incorrect answer results in a lost turn. Progress is influenced both by conceptual accuracy and chance, as ladders reward momentum and snakes punish careless advancement. The objective is to reach the final square in time, making consistency, focus, and conceptual clarity essential for qualification to the next round. Only the first few who succeed will be able to move forward.

Delegate Cap: 3

Round 2:

Qualified teams will enter the finale by designing and constructing a functional catapult using a fixed set of materials provided on-site. This round tests the practical application of physics principles including projectile motion, energy transfer, forces, and optimization under constraints. Teams must balance accuracy, range, and structural stability while working within a limited time frame. Performance will be judged based on launch precision, consistency, design, quality, teamwork and effective use of physical concepts, rewarding teams who can translate theory into controlled, real-world outcomes under pressure.

Delegate Cap: 3

Note: Delegates are not allowed to bring any materials. Everything will be provided onsite during the final round.

Syllabus: All concepts, principles, and tasks assessed in this round will be based on the O Levels, A Levels, and FSC Physics curricula.