

Lahore Grammar School Johar Town Senior Boys Campus

## CYGNUS' VEIL

STUDY GUIDE



12·13·14 SEPTEMBER Round 1:

Delegate Count: 3 Duration: 2 hours

In this round, three teams of two delegates each will be seated around a large orbital map. They will be presented with a scientific scenario, such as launching a satellite for a specific purpose. Based on the scenario, each team will have fifteen seconds to discuss and then place their satellite token on the orbital zone they think is most appropriate.

The map will display various zones including low Earth orbit (LEO), medium Earth orbit (MEO), geostationary orbit (GEO), the Moon's orbit, and Lagrange Points (L1 and L2). After placing their satellite, teams may be asked to briefly justify their decision. Points will be awarded based on the accuracy and reasoning of their placement.

Teams will be divided into groups of three. Each match will take approximately twelve to fifteen minutes, with the full round lasting around two and a half to three hours.

Note: This is an accumulation round.

Round 2:

Delegate Count: No cap

**Duration:** The scavenger hunt will last for 30 minutes. Additionally, for presentations, each team will be given 6 minutes to research and present their findings.

This round will be a scavenger hunt in parts.

Contests will have to search around for 'artifacts', each through clues. These artifacts will be stickers of telescopes and geothermal vents, vents being the more difficult of the two. Fig 1.1 and Fig 1.2 show the photos to be used as stickers.





The stickers will correlate to a type of data that the contestants will receive in order to predict the livability and weather conditions of a theoretical 'Planet X'. The amount of stickers found will also correlate to the amount/usefulness of data given to the teams, according to the table below;

Artifacts	Amount of Stickers Found		
Telescope	1: 20 light seconds	2: 10 light seconds	3: 50,000 km
Geothermal Vents	1: 15% of the surface of the planet	2: 45% of the surface of the planet	3: 75% of the surface of the planet

Round 3:

**Delegate Count**: 2

**Duration:** 1 hour and 30 minutes per section. Total time taken for the

round is 3 hours.

This round is a surprise round. It is split into two sections; for each a hint has been provided:

## Section I



## Section II

Darts and Astronomy...

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