# World Space Week 2022

# **Information Booklet**



# Astronomy & Planetary Club Cadet College Hasanabdal





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### Cadet College Hasanabdal, Pakistan

Cadet College Hasanabdal, being the first institution of its kind in Pakistan, has been a trend-setter in the field of quality boarding schools meant for boys. In its history of over sixty years, its graduates have not only contributed tremendously in the national mainstream, many have moved across frontiers, and are now playing their roles at the global level. A well-rounded personality, built around the core values of character, integrity, intellectual superiority and commitment have always been at the center-stage of our grooming at Hasanabdal. That's why our graduates have always managed to survive in some of the most hostile conditions of fiercest competition and of formidable adversity.

Academic excellence has always been the central point of our priorities here, because we know that it plays a pivotal role in the proper placements of our graduates. Hassanabdal has produced so many high-achievers in its academic history that CCH has become synonymous with Board toppers. Our programs have had the strength to have our students accepted not only in the very best of the national universities, but even in some of the Ivy League institutions.

CCH has come a long way from where it started its journey 68 years ago, and is ready to take-on new challenges. With Pakistan at the center-stage of many controversies in the global perceptions, we need to equip our scholars with the skills to not only excel and distinguish in multicultural global settings, but to also prove effective ambassadors of a progressive Pakistan. It's time for us to break out of our national shell now, and to prepare our graduates for the greater challenges of a cosmopolitan global village. Which institution in Pakistan can be better placed to embark upon this new challenge than CCH!

## **World Space Week**

World Space Week is an international celebration of science and technology, and their contribution to the betterment of the human condition. The United Nations General Assembly declared in 1999 that World Space Week will be held each year from October 4-10. These dates commemorate two events, firstly the October 4, 1957, the Launch of the first human-made Earth satellite, Sputnik 1, thus opening the way for space exploration and secondly the October 10, 1967, the signing of the Treaty on Principles Governing the Activities of States in the Exploration and Peaceful Uses of Outer Space, including the Moon and Other Celestial Bodies.

World Space Week consists of space education and outreach events held by space agencies, aerospace companies, schools, planetaria, museums, and astronomy clubs around the world in a common time frame. These synchronized space events attract greater public and media attention. This week is thus the ideal time each year to use outer space and motivate students to learn about its peaceful uses and benefits for mankind. The youth of today have so much to benefit from space. Space has changed their world and offers even greater excitement and opportunities to explore for their future. World Space Week celebrations aim to achieve the objectives, namely to educate people around the world about the benefits that they receive from space, to encourage greater use of space for sustainable economic development, to demonstrate public support for space programs, to excite young people about science and to foster international cooperation in space outreach and education.

## World Space Week at Cadet College Hasanabdal

World Space Week at Cadet College Hasanabdal is not only going to give the students a platform to prove their worth but also will enhance their abilities and eventually help build a great future for Pakistan. Cadet College Hasanabdal, one of the best institutions of its kind in Pakistan and has taken an initiative to organize a number of events in WSW. Students and faculty from various schools/colleges are expected to participate with sheer enthusiasm.

CCH has stepped forward in this field to inspire students of various schools/colleges from its nearby areas. The event is to infuse a sense of competition in the bloodstream of the students and lighten up the horizons of their minds. The space-themed competitions in the art of literature, aero-modeling, computer programming, model making, space technology innovation and application have astronomically wide scopes. In addition to this, the events provide students a lifetime experience and opportunity to further nourish their personalities. They are to pick their taste from a concoction of events and utilize their abilities to put up a good show.

## **General Rules and Regulations**

1. Events are divided into two main Levels as

Abecedarian Level Grade 5-8

Virtuoso Level Grade 9-12/O and A levels

Level for each event is indicated with event details.

- 2. Theme / Medium/ Titles and time limits will be followed strictly.
- 3. Use of indecent language, derogatory remarks (whether direct or implied) about important personalities, national leaders, political parties, government agencies, religion/sect, teachers can lead to disqualification.
- **4.** Any team found involved in any type of cheating (PDAs, Palm-tops, cell-phones etc.) will be disqualified with immediate effect.
- **5.** Participants of all competitions are required to be present at the stated venue/hall 15 minutes before the time mentioned in the program for the particular event.
- **6.** Host will assign performance slots to the participants.
- **7.** Confirmation of registration prior to the start of the event is compulsory.
- **8.** 1<sup>st</sup> and 2nd, prizes shall be awarded for each Level of the competition but whoever wins the most competitions will be declare as the "Overall Champion of World Space Week 2022".
- **9.** Any institute's pictures/ artwork/ video exhibiting vulgarity, racism, religious discrimination or any other offense will be disqualified.
- **10.** All participants are expected to act graciously during their stay at CCH and interact with other participants, officials and judges respectfully. Failure to do so may result in disqualification from the event.
- **11.** Participants must not attempt to manipulate the rules and regulations to their advantage.
- **12.** The use of tobacco or any other drug at CCH premises is strictly prohibited.
- **13.** Distracting or interfering with any competitor, any official can lead to disqualification.
- **14.** Decisions of judges and CCH officials shall be final and unchallengeable. However, in case of any dispute, the verdict by the OiC Wider-Curriculum and DOS (CCH) being the arbitrator, shall be final and binding on all the participants.
- **15.** Accommodation, Meals, Transport and TA/DA will NOT be furnished by CCH.
- **16.** All student participants must bring their **original CNIC / Student ID card**. It is mandatory for participants to wear the student ID card throughout the event.
- 17. If any foreign student /faculty participant is interested to participate then a copy of passport with a cover letter from the school/college shall be sent before the event.
- **18.** Original CNIC & School/ College ID card for the teacher/coordinator is obligatory.
- **19. On-spot registration is highly discouraged** and will be done subject to the availability of positions in respective competitions only.
- **20.** The artwork will remain the property of CCH.
- 21. Note: CCH reserves the right to change details / rules and regulations of the competitions without any prior notice.

#### SPACE KNOWLEDGE COMPETITIONS

#### **SPACE IN QURAN:** A TELESCOPE OF RELIGION

**Description** Qiraat Competition: Verses from The Holy Quran related to the theme of Space

Technology and Applications

Category Prepared

Duration 2 – 3 Minutes

Level Abecedarian & Virtuoso

Team 1 participant in each Level

**Instructions** Prepare a slideshow/ ppt. of the verses you chose to recite and their translation in English/Urdu for the ease and understanding of the audience. Please bring along ppt. at the time of the event.

#### SPACE DECLAMATION: SPEAK FOR SPACE

**Topics** 1.The Future of Space Exploration and Human Development.

2. Is Space Exploration a Waste of Time and Money?

CategoryPreparedDuration3-4 MinutesLanguageUrdu & English

**Level** Abecedarian & Virtuoso

**Team** 2 participants each Level: One to speak in Urdu and other in English

Instructions

a. Speaker will speak on any one of the above mentioned topics.

- **b.** A speaker will speak for a minimum of 3 and a maximum of 4 minutes. First bell will ring after 3 minutes and the final bell will ring after 4 minutes. Marks will be deducted for failing to observe the stipulated time limit.
- **c.** Paper reading is not allowed otherwise it will result in negative marking.
- **d.** Top three positions will be awarded in both Urdu and English in each Level depending upon aggregate points of judges.

#### **SPACE QUIZ: SEEK KNOWLEDGE**

**Description** Quiz Competition

LanguageEnglishCategoryPreparedLevelVirtuosoTeam2 Participant

**Instructions** a. Teams will be shortlisted for competition based on the results of the qualifying

round.

#### SPACE INNOVATION

#### SPACE DEBRIS MANAGEMENT: SPACE JUNK DESIGN

**Description** Participants will be asked to design and make useful models from junk on the theme of "Space & Sustainability" Participants will be allowed to bring junk with them from home.

**Duration** 2 hours **Category** On Spot

**Level** Abecedarian & Virtuoso

**Team** 2 participants from each Level

**Instructions** Participants would bring the junk material and will build the model according to the theme above mentioned on spot.

#### **SPACE DESIGNING: MODEL MAKING**

**Description** The participants will make space models on the "Space & Sustainability", which will be displayed at CCH.

CategoryOn SpotDuration2.5 Hours

**Level** Abecedarian & Virtuoso

**Team** 4 participants: Two for each Level

**Instructions** The host will provide the material to make only one model and it will be an

on-spot event.

#### **SPACE TRAVEL:** SPACE TUNNEL DESIGN

**Description** Participants will have to design Space tunnels according to the distances

between planets. Purpose of the tunnel is to travel between planets.

Duration2 hoursCategoryOn spotLevelVirtuosoTeam3 participants

#### Instructions

a. The host will provide the material to make only one model and it will be an on-spot event.

b. Use of any electronic gadget will lead to disqualification.

#### SPACE THERMODYNAMICS: HOT AIR BALLOON

**Description** Participants will have to design a hot air balloon using material provided

**Category** On Spot **Duration** 2 hours

Level Virtuoso & Abecedarian

**Team** 2 participants

**Instructions** A pre-event workshop will be held providing necessary information.

#### **Space Solar Microwave**

**Description** Participants will be asked to design the solar microwave project on the theme

of "Space Participant".

College will provide material regarding this project to the participants.

Duration2 hoursCategoryon SpotLevelVirtuosoTeam2 participants.

Instructions

Participants should have the knowledge about project.

No detail will be provided to the participants about project.

Participants will be judge on the efficient working of the project.

#### **SPACE CREATIVE WRITING**

#### **SPACE FICTION: ESSAY WRITING**

**Theme** "Space & Sustainability"

Duration2.5 HoursCategoryOn spot

Language Urdu & English

**Level** Abecedarian & Virtuoso

**Team** 2 participants in each Level: One in Urdu and One in English

Instructions Topics related to the above Theme will be given at the event time. (Approximate

words 1000 – 1500)

#### **SPACE FICTION: STORY WRITING**

**Theme** "Space & Sustainability"

Duration2 HoursCategoryOn spot

Language Urdu & English Level Abecedarian & Virtuoso

**Team** 2 participants in each Level: One in Urdu and One in English

**Instructions** Topic/theme/outline related to the above theme will be given at the event time.

(Approximate words 1000 – 1500)

#### **SPACE JOURNALISM: REPORT WRITING**

**Theme** "Space & Sustainability"

**Duration** Whole Day

Category On spot Language Urdu & English

**Level** Abecedarian & Virtuoso

**Team** 2 participants in each Level : One in Urdu and One in English

**Instructions a.** Each student has to cover WSW 2022 at CCH and write a report on it. **b.** Participants will write a report on the day of the event, on spot. (Approximate words 800 – 1000)

#### **SPACE POETRY: WHERE WORDS EXPRESS**

Theme "Space & Sustainability"

LanguageUrduCategoryPreparedDuration3 minutesLevelVirtuosoTeam1 participant

**Instructions** Poetry (Nazm/Ghazal), chosen/written should be related to the Theme.

#### SPACE TECHNOLOGY APPLICATIONS

#### **FLYING WINGS: GLIDER FLYING**

**Description** Each team will be given balsa wood along with other necessary stuff to make a glider in a given time slot. Winners will be decided after test flights.

CategoryOn SpotDuration3 HoursLevelVirtuosoTeam4 participants

#### Instructions

- **a**. An introductory training session will be held at the start of the competition in which participants would be given a demonstration of glider design and making.
- **b**. CCH students will help and guide the participants during the design build.

#### **Water Rocket**

**Description** Participants will be provided with all necessary items to make water rockets. Winners will be decided after test flights.

Duration2 hoursCategoryOn SpotLevelVirtuoso

**Team** 04 participants from each Level

#### **DESIGNING SAFE LANDING: PARA EGGS**

**Description** Participants will have to design a safe landing for eggs from a height of around 40 feet using parachute designing.

CategoryOn SpotDuration2 HoursLevelVirtuosoTeam2 participants

**Instructions** An introductory training session will be held at the start of the competition.

#### SPACE MODELS-DISPLAY

**Description** The participants will bring self-designed models on the Theme "Space & Sustainability" which will be displayed at CCH.

**Category** Prepared

**Duration** Models will be displayed for event day

Level Abecedarian & Virtuoso

Team 4 participants in each Level

Instructions

- a. Any institute participating in the exhibition will be limited to displaying one model. b. Display space is limited. CCH will only provide one table.
- c. Exhibitors are responsible for the safety and security of their displayed Models while CCH will do its best to protect the displayed items; it assumes no liability for any damage and/or loss that may occur.
- d. Items that may contain components from proscribed (illegal) types cannot be entered in CCH.

#### **SPACE SWIRL: PINWHEELS DESIGN**

**Description** Participants will have to design 3 different pinwheels.

**Category** On Spot **Duration** 2 hours

**Level** Virtuoso & Abecedarian

**Team** 2 participants

Instructions

- a. A pre-event workshop will be held providing necessary information and material.
- **b.** Proper Designing and building of all three different pinwheels in allocated time is compulsory to qualify for prize.
- **c.** Judgment will be made on the basis of maximum time it swirls along with design clarity and uniqueness.

#### **CONTROLLING THRUST: PROPELLER POWERED CAR**

**Description** A team will have to design and build a car powered by a propeller attached with the car. As the fan starts rotating, it should force the car to move forward.

CategoryOn SpotDuration2 HoursLevelVirtuosoTeam2 participants

#### Instructions

- a. Not more than 1.5 hours will be given for building this car.
- **b.** The car should at least cover 10 feet distance to qualify for the judgment.
- c. Participants are required to build the car with the given material.

#### **SPACE FINE ARTS**

Following rules are applied to all events of Space Fine Arts Level.

- a. The host will provide drawing sheets only.
- b. The artwork will remain property of CCH.
- c. The participant should bring their own painting/sketching/other required material. In addition to these, event wise specific rules are mentioned as well

#### **COLORS IN SPACE: PAINTING**

**Theme** "Space & Sustainability"

CategoryOn SpotDuration2 Hours

**Level** Abecedarian & Virtuoso

**Team** 2 participants: One for each Level

**Instructions** The paintings will be judged on the basis of innovation, originality, color combinations, visual appeal and relevance to the Theme.

#### **SPACE ARTS: SKETCHING**

**Theme** "Space & Sustainability"

CategoryOn SpotDuration2 Hours

Level Abecedarian & Virtuoso

**Team** 2 participants: One for each Level

**Instructions** The sketches will be judged on the basis of innovation, originality, visual appeal and relevance to the Theme.

#### **SPACE TEXT: CALLIGRAPHY**

Theme "Space & Sustainability"

CategoryOn SpotDuration2 Hours

**Level** Abecedarian & Virtuoso

**Team** 2 participants: One for each Level

Instructions

a. No more than 3 ayats can be portrayed.

b. Participants should use known Arabic calligraphic scripts.

c. Participants are required to bring the items along with them

#### **SPACE GRAPHICS**

Following rules are applied to all events of Space Graphics Level.

- a. Participants will not be allowed to bring along any pre-made stuff.
- b. Internet facility will be provided.
- c. Allowed Software are Adobe Photoshop, Adobe Illustrator, Corel draw, MS Paint.
- d. The participants will have to email the PSDs (Photoshop files) for judgment to hodcs@cch.edu.pk with a mention of the Participant's Name, School/College Name etc.

#### **SPACE MEMENTO:** SOUVENIR DESIGN

Theme "Space & Sustainability"

CategoryOn SpotDuration2 HoursLevelVirtuosoTeam1 participant

#### **SPACE GRAPHICS:** E POSTER DESIGN

Theme "Space & Sustainability"

CategoryOn SpotDuration2 HoursLevelVirtuosoTeam1 participant

#### **SPACE MINT: COIN DESIGN**

Theme "Space & Sustainability"

CategoryOn SpotDuration2 HoursLevelVirtuosoTeam1 Participant.

#### **SPACE MATHEMATICA: MATHOMETER**

**Description** This is a Mathematics based quiz having four rounds of different difficulty. Participants will be judged for their secondary and higher secondary basic mathematics concepts and skills.

CategoryOn SpotDuration3 HoursLevelVirtuosoTeam2 participants

#### Instructions

- a. There will be 4 rounds in the event.
- **b.** Each round will have a different set of questions with different rules and methods e.g. oral blitz round, written categorical round etc. with questions based on mathematics.
- c. The correct answers will be awarded points.
- d. The team with the most points at the end of the final round will be declared winner.
- e. Each team may bring other tools such as calculators etc. (CCH will not provide these items)
- f. The difficulty level will be according to their curriculum.

#### **SPACE FUN:**

#### SPACE WEEK THREE LEGGED ALIEN RACE

#### a) RULES FOR THREE LEGGED ALIEN RACE:

Following rules are applied to event of Space fun: Three legged alien race.

- Participants will not provide any colour paints and dress to go for alien theme.
- Participants must bring strap of any type (a piece of cloth or rubber band to tie the legs)
- 02 x members of one team will be allowed to participate for 100 meter length race.

SPACE FUN	THREE LEGGED RACE
Theme	"Space & Sustainability"
Length	100 Meter
Level	Abecedarian & Virtuoso
Team	02 x members from one team of each level

#### **SPACE WEEK THROUGH LENS**

Following rules are applied to all events of Space Graphics Level:

- a. Participants will have to bring their own cameras/smart phones along with them.
- b. Internet facility will be provided.
- c. Allowed Software are Adobe Photoshop, Adobe Illustrator, Movavi, Wondershare Filmora.
- d. The participants will have to email the PSDs (Photoshop files) and videos for assessment/judgment to naseer.ahmad@cch.edu.pk with

a mention of the Participant's Name, School/College Name etc.

#### **Space Photography: Capture the event**

Theme "Capture the events"

Category On the Spot
Duration Whole day
Level Virtuoso
Team 2 participant

#### Weightlessness Experience

#### **Description**

Participants will be asked to go into swimming pool and find space week theme flag. The winner will be the one who will take shortest time to find the flag.

Duration2 hoursCategoryon SpotLevelVirtuosoTeam2 participants.

#### Instructions

Participants should have their space suite along with them which they will use as swimming c

# **Get Connected**

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# **Resource Websites**

#### **United Nations Office for Outer Space Affairs**

http://www.oosa.unvienna.org/index.html

#### **World Space Week Association**

http://www.worldspaceweek.org/wsw/

#### Pakistan Space & Upper Atmosphere Research Commission (SUPARCO)

http://www.suparco.gov.pk/ http://suparco.gov.pk/webroot/pages/wsw.asp?wswlinkid=1

#### Institute of Space Technology, Islamabad, Pakistan

http://www.ist.edu.pk/wsw/2015

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