DIARA THE GEOGRAPHY MAGAZINE VOI.- 7, 2024

MAYO COLLEGE GIRLS' SCHOOL

CONTENTS

| EDITOR'S NOTE | 01 |
|---|--------|
| PRESIDENT'S NOTE | 02 |
| INDIA JOINS THE MINERAL SECURITY PARTNERSHIP | 03 |
| THE HEARTBEAT OF THE OCEAN AND CLIMATE REGULATION | 04 |
| AI APPLICATION IN GEOGRAPHY | 05 |
| TRAVELOGUE | 06 |
| COOLING DOWN A BOILING PLANET | 07 |
| WASTE MANAGEMENT CRISIS | 08 |
| MONO LAKE: A UNIQUE ECOLOGICAL GEM IN CALIFORNIA | |
| BEAUTY IN THE PERISHABLE FATE | 10 |
| QUICK FACTS BY KAASHVI | |
| THE NATURAL ALLIANCE: GEOGRAPHY FUELS BIOLOGY | |
| THE MYSTERY OF BAN STAMBH | 13 |
| A HUNGER-DRIVEN TRAGEDY | 14 |
| MAPPING THE ECONOMY: HOW GEOGRAPHY SHAPES GLOBAL MARI | KETS15 |
| SOCIETY ACTIVITIES | 16-17 |
| PUZZLES | 18 |
| RIDDLES & MEMES | 19 |
| ANSWERS | |

CREDITS: DEPT. OF GEOGRAPHY KAAVYA BHANSALI (EDITOR) YUVNA MADAN (STUDENT IN-CHARGE) MS. NUZHAT AHMED, MRS. RAINA SHARMA (TEACHERS IN-CHARGE)

EDITOR'S NOTE



As I reflect on this issue of DHARA, I'm reminded of how Geography touches every corner of human thought and activity. It's a discipline that isn't confined by borders but, rather, breaks them down. This year, our theme explores the intricate connections between Geography and other subjects, shedding light on how Geography serves as the foundation for understanding everything from culture and politics to history and art.

There's a well-known quote by Michael Palin that resonates deeply with me: "Geography is the subject which holds the key to our future." Geography doesn't just help us navigate space; it helps us navigate ideas, challenges, and our shared destiny. Whether we're discussing climate change, migration, or the global economy, Geography gives context and clarity, enriching our understanding of the world we live in.

In this issue, we explore how Geography intertwines with subjects to explain the evolution of human communities, and how it intersects with Economics to reveal patterns in global trade and inequality. We examine how it aligns with Literature, offering landscapes that inspire stories, and how it underpins Political Science, drawing the lines of power and conflict. As E.O. Wilson once said, "The most instructive travel is to map Geography into History." Geography is a lens through which we can grasp the historical forces that have shaped our present and future.

For me, Geography is not just about places on a map; it's the core that links disparate subjects, providing the context that helps us see the bigger picture.

This issue is a celebration of Geography's unique ability to connect subjects and spark new insights. I hope it leaves you with a deeper appreciation of the world, not only as a collection of places but as a vast network of relationships and ideas. With curiosity and gratitude.

Kaavya Bhansali C/2926 Editor

PRESIDENT'S NOTE



In the seventh edition of 'DHARA- The Geography Magazine', I reflect upon how the subject of Geography is extremely versatile in its ideas and concepts, breaking the stereotype of only the study of land and places. It aims to explain why certain things exist in certain locations, how objects in nearby or far-off locations affect one another throughout time, and why certain places and the people who inhabit them undergo specific changes and developments. The "Geographic Perspective" revolves around posing these queries and forms the subject's core.

Through this edition, we discuss how the subject is interdisciplinary in nature as it contributes to various theories, ideologies, disciplines and subjects. The central idea of Geography in various disciplines makes us dig deeper into the subject and grasp new imagery. The Russia-Ukraine war, melting of ice glaciers in Antarctica, displacement of population in Syria, marine dispute in the Indian Ocean, problems of developing economies and global food crisis exemplify the geo-political, economic geography, environmentalism and historical geography aspects of the subject.

By being a part of the Geography Society, I have been able to learn about the vital connection between humans and the environment, and how this interaction plays a key role in our developing future. I hope that the Geography Society will continue to grow, thrive, and inspire building a community of passionate geographers, driven by curiosity and a desire to make a difference.

Khanak Sharma P/2881 President Geography Society

India Joins the Mineral Security Partnership

A series of initiatives by India, such as the setting up of the National Mineral Exploration Trust in August 2015 to increase domestic exploration and multiple amendments, to Mines and Minerals, has been proactive in its attempt to ramp up the domestic supply chain.

India further developed a list of 30 critical minerals that it could focus on to build a strong value chain. For most of these minerals, demand is mainly met through imports. Lithium, Cobalt, and Nickel are among the minerals out of a total of thirty whose demands are fully dependent upon imports.

As a move towards this, Prime Minister Narendra Modi visited the USA in June 2023, during which India joined the Mineral Security Partnership (MSP). After the visit, India became the fourteenth member state of MSP. This partnership comprises thirteen countries plus the European Union which aims at supporting nations, realising economic benefits from their geological endowments, and planning to invest across fifteen impactful high critical mineral projects worldwide.

The partnership could work to become an agent of sorts for India's emergence as a Global South leader, driving the clean energy transition.

One of the key drives for India's engagement in the MSP is an ambitious plan for transition to a green economy. Ambitious goals were set by India relating to the increase in its renewable energy capacity and adoption targets for EVs. To realize these aspirations, securing stable supplies of critical minerals will be important. For example, Lithium and Cobalt are essential constituents of batteries used in EVs and Energy Storage Systems. Opening up access to these minerals can help India support the growth of renewable energy and reduce carbon emissions. This engagement may further foster technological advances and innovation in India's use of the MSP. Collaboration with like-minded member states in other MSPs providing for knowledge sharing, best practice sharing, and expert faculty in technology can hugely enhance Indian capabilities relating to mining, processing, and uses of critical minerals, thereby contributing to the development of a more self-reliant and robust industrial base. Participation in such partnerships would be essential to secure vital mineral resources that could fuel India's green economy aspirations, technological capabilities, and geopolitics. The partnership offers a host of benefits, which are minimization of risks in supply chains while promoting sustainable development and providing a leading role for India in framing global policies on critical minerals.

Ambica S. Rathore M/ 3370 Pre Sc Arts A



Plankton are the organisms that drift in the ocean and in freshwater bodies. They are called the whole food of the ecosystems of the Earth. They are so small that they are not visible to the naked eye. Despite their microscopic size, planktons are an important part of the marine food cycle, gas exchange in the ocean, and climate regulation. Where plankton concentration and production are concerned, geographical factors are the main issue, i.e. ocean currents, temperature, and nutrient availability. There are two types of planktons: phytoplankton, which are the plant-like organisms that carry out photosynthesis, and zooplankton, which are the animal-like organisms that feed on phytoplankton. In fact, they are the organisms that stand at the base of the aquatic food chain. They contribute to the Earth's oxygen production (phytoplankton being responsible for over half of the planet's production). Geographical characteristics and conditions play a big role in the plankton distribution around the world. Ocean currents such as the Gulf Stream and Humboldt Current carry water from the bottom to the surface with nutrients in it, which makes it a perfect place for the plankton to grow. Upwelling areas are hotspots for plankton, and cold water is abundant in these areas. Warm waters, on the other hand, are more deprived of nutrients and therefore have lower plankton productivity. Cold places like the polar oceans have many big populations of plankton because their waters are rich in nutrients. Usually, coastal areas and estuaries are the main carriers of the nutrients which promote high plankton productivity and so support a rich marine ecosystem.

Plankton's spatial distribution is closely related to the state of the ecosystems and the climate. In areas where a load of plankton is present, there is a lot of marine biodiversity, which supports fish and other trophic levels. Furthermore, as the phytoplankton reduce the level of carbon dioxide by absorbing it during photosynthesis, they help increase the production of oxygen in the atmosphere. Thus the carbon cycle of the Earth is balanced. Planktons are fundamental to marine ecosystems and also to global climate regulation as they are the ones affected by geographical factors like ocean currents, temperatures, and nutrient flow. Hence, the plankton is crucial for the preservation of marine fauna and for solving the problem of climate change.

Ahana Jain C/2316 Pre Sc Arts B

Artificial Intelligence & Geography

Artificial Intelligence (AI) is revolutionizing Geography by enhancing the analysis and interpretation of spatial data across various domains. Remote sensing, which involves data collection from satellites and aerial imagery to monitor the Earth's surface, benefits significantly from AI's capabilities. AI algorithms automate the analysis of vast datasets, enabling precise classification of land use, monitoring of deforestation, and tracking of urban expansion with high accuracy.

These insights are pivotal for environmental conservation and urban planning, facilitating rapid response to natural disasters and informed decision-making. In addition to remote sensing, AI excels in predicting natural disasters like floods and hurricanes by analyzing historical and realtime data. This technology also supports climate change modeling and environmental monitoring, offering policymakers and scientists deeper insights into climate patterns and trends. AI plays a crucial role in smart city development by optimizing traffic flow, managing waste, and reducing energy consumption. For instance, AI-driven systems analyze traffic patterns to ease congestion and suggest optimal routes, enhancing urban mobility and resource efficiency. Furthermore, AI's applications extend to agriculture, where it aids precision farming by monitoring crops, analyzing soil health, and predicting yields. AI-powered drones and sensors provide real-time crop data, empowering farmers to make informed decisions that optimize land use and reduce environmental impact. In navigation and transportation, AI improves GPS accuracy and optimizes routes for logistics, thereby reducing travel time, fuel consumption, and carbon emissions. Real-world examples highlight AI's impact across Geography, such as predicting monsoon patterns in India to aid agricultural planning and using satellite imagery in the United States to monitor wildfire risks. Despite its promise, AI adoption in Geography faces challenges like data privacy concerns, ethical implications, and the need for specialized skills. Transparency and fairness in AI systems are critical for building public trust and overcoming these hurdles. Looking ahead, collaboration between AI experts and Geographers promises to unlock new possibilities in spatial analysis and predictive modeling. Embracing AI in Geography not only enhances our understanding of the world but also offers innovative solutions to complex global challenges, paving the way for a sustainable and efficient future.

Agrima Vaishnava K/2728 VIII-D

Travelogue

Picture credits: Travelogue Reps



I had the opportunity of visiting Vietnam where I learnt about the Vietnam War and the Cu-Chi tunnel. This taught me power, bravery, and how resourceful people can be in difficult situations. The Vietnam War took place from 1950- 1975. The main part of the war was North Vietnam, which wanted the country to be communist and South Vietnam wanted Democracy.

There were many battles which North Vietnam and South Vietnam fought. The USA had sent over 5 lakh soldiers to fight in the Vietnam War. Two major battles were about the TET Offensive and the fall of Saigon.

0.012.010

The US government helped many people to escape by helicopter. The Cu-Chi tunnels - The secret world, were used by the North Vietnamese soldiers. It was a secret underground city where people used to hide from South Vietnam and the US Army. I got an opportunity to visit the Cu-Chi tunnel. People had to crawl as it was very narrow and had to sleep, cook, and even eat in that limited space. The tunnel also had hidden traps for safety, if attacked by the South Vietnam soldiers. Cu-Chi had special kitchens where smoke was directed out in different directions. Cu-Chi tunnels were important in the Vietnam War because they helped North Vietnam soldiers plan and live secretly in South Vietnam and fight the war.

Aara Baid JS/3194 V- A

Cooling Down a Boiling Planet

Picture Credits: Adobe

It's official. Global warming is out, global boiling is in!

It's no secret that the planet is steadily inching towards climate catastrophe. With rising CO2 levels everything is boiling up, one of which is the Arctic.

According to WWF calculations, the Arctic ice is being lost at the rate of 13% every decade. While over the last 30 years the thickest and oldest ice sheets have declined by an astonishing 93%.

This phenomenon is frequently highlighted in news reports and scientific studies. The effects are profound: rising sea levels threaten coastal communities, shrinking freshwater supplies endanger agriculture and drinking water, and disrupted ecosystems impact biodiversity.

However, amid the concerning data and grim forecasts, it's important to highlight the innovations and efforts being made to combat this catastrophic melting.

British start-up 'Real Ice', based on restorative technology, is working to reverse the melting.

The organisation's AquaFreezing approach, is designed to enhance the natural sea ice generation process (the freezing of sea water into sea ice).

The AquaFreezing approach works by using a hydrogen powered drone to drill the ice sheet in winter months. As the ocean water comes to the surface, it freezes atop the pre existing sheet. This process thickens the ice sheet, giving it the ability to survive the summer months. The project is still in its initial stages however it exhibits great promise. Real Ice is a United Nations backed company, however it still needs public support and funds, something we can provide.

Such initiatives are testament that even though the situation is dire, human ingenuity and effort can make a significant difference in protecting our planet and combatting global warming.

Aryaamai Shekhawat C/2754 Pre Sc Arts A

Waste Management Crisis

Picture credits: Uffizio

"The future we seek is the future we must have", is a statement that rings true, particularly in the context of the increasing waste crisis. The earth is indeed under stress due to the volume of waste practically every activity done by man creates. This has bled so much that human consumption has reached a self-destructive level. Dumpsites are filled, pollution levels are very high, and the natural ecosystem is covered in very unhealthy environmental changes within a short period.

The more conventional waste management techniques which include disposal in landfills and burning of waste are not just inefficient but also cause more harm to the ecosystems. With this background in mind, it is clear that the issue of waste has reached a crisis therefore confirmation of the necessity of waste management strategies becomes imperative. The circular economy model is a concept that has come as a breakthrough, especially in the optimization of the use of materials and resources; this is principally aimed at eliminating waste and pollution by the continuous use of resources.

One approach that is promising is the use of waste-to-energy technologies. Since the organic waste will be used to generate energy, other fossil fuels will not be used consequently. Therefore, minimization and containment will be achieved. Besides, these processes can also be modified to produce other useful products, for instance, fertilizers and plant-based plastics.

Equally important is the promotion of sustainable patterns of production and consumption. It is possible to help fight the waste problem by cutting down on buying things we do not need and using less packaging. Furthermore, investing in companies that are environmentally friendly and ethically responsible will help support these ideas.

Enhancing waste management infrastructure, especially in developing nations, is paramount. Establishing efficient collection systems, modernizing waste processing facilities, and fostering public awareness about waste reduction and recycling are crucial to guaranteeing universal access to effective waste management services.

The waste crisis is a formidable challenge that necessitates a comprehensive approach. By transitioning to a circular economy, investing in cutting-edge technologies, fostering sustainable consumption habits, and fortifying waste management infrastructure, we can forge a more sustainable and resilient future for ourselves and posterity. As the United Nations Environment Programme (UNEP) has starkly quoted; "If we persist in producing waste at the current pace, the world will require two additional Earths by 2050. It is imperative that we take decisive action to safeguard our planet and ensure its viability for generations to come."

Gurman Kaur Sidhu P/2785 IX-B

Mono Lake: California's Ecological Gem

Mono Lake is a mystical landscape with fascinating ecological dynamics. It existed for over 760,000 years and is set within a desert basin ringed by snow-capped mountains.

Mono Lake is a rather unusual lake; it has no natural outlet and, thus, is known as a terminal basin. Water enters the lake through tributaries, although the only possible way water can leave it is through evaporation. Over thousands of years, this has caused minerals and salts in the water to be concentrated, so that the lake water is three times saltier than the ocean.

Unlike most freshwater lakes, Mono Lake is inhospitable to fish, yet its waters are home to other life forms: millions of alkali flies and brine shrimp that spend their lives in the saline waters of the lake feeding millions of migratory birds-The California gull and phalaropes ultimately dependent on the Mono Lake during its migrations.

It consists of tufa towers, which are a natural limestone formation, amazingly rising from the surface of the water. The process goes on underwater when a stream of calcium-rich freshwater springs through the alkaline water of the lake; it causes the calcium carbonate to start precipitating out and forming the towers over time. Today, ghostly spires above the surface of Mono Lake continue to rise, adding an eerie touch to an almost extraterrestrial atmosphere at Mono Lake, as its water levels have dropped. While quite subtle for most of its history, Mono Lake quietly sustained its unique ecosystem with little disruption. In the early part of the 20th century, however, the lake faced an ominous threat. The city of Los Angeles began diverting water from Mono Lake's tributaries to slake the thirst of its burgeoning population. This diversion drastically lowered the lake's water levels, exposing the lakebed and increasing its salinity, and it put in jeopardy its fragile ecosystem. By the 1970s, more than 30% of Mono Lake's surface area was gone, and many were convinced the lake's ecosystem would collapse.

While the water levels have recovered to some extent, Mono Lake remains a fragile ecology. Climate change brings new complications: unpredictable water supply and rising temperatures may further disturb the fragile balance of the lake. The more visitors come to this odd beauty and its tufa formations, the higher the risk of human interference destroying what they come to see.

Besides its ecological importance, Mono Lake has proved a site of recent scientific discovery. This strange environment has been used by scientists in the study of extremophiles, the name given to those organisms that live in extreme conditions. Scientists at NASA have studied there how life can exist in such highly alkaline and saline environments, hence providing insight into the possibility of life on other planets.

Mono Lake - its peculiar ecosystem, towering tufas, and its history of environmental advocacy stands as a testament to the fragility and resilience of nature.

Yuvna Madan C/2732 Pre Sc Cambridge Picture credits: sunrise maps logs

住家 WABI-SABI Beauty in the Perishable Fate

Wabi-sabi, the Japanese philosophy that welcomes impermanence, imperfection, and patience, earnestly corresponds to the discipline of geography. Earth is the monumental evidence of the wabi-sabi principle, persistently remolding and reshaping. It unfolds the history of change as an inevitable fact of life, from the ancient eras when the land was adorned by boundless thickets to the snowy serapes of the Ice Age that encased the entire world.

Extensive marshy forests gave way to freezing temperatures and expansive ice sheets during the shift that materialized when the Carboniferous Period evolved into the Permian Ice Age. This radical change brought about the creation of ecosystems never seen before. This alone proves that nothing lasts eternally. Everything perishes one day or the other; be it a habitat, a dynasty, or an era.

The demise of the dinosaurs, a sort of animal that first developed some 245 million years ago and was once the dominant force on Earth, lends more credence to this idea. When they vanished some 66 million years ago, it wasn't the end of the world; rather, it was the prequel to our present earth. Ongoing climate change is the cause for a multitude of plights: rising sea levels that compel coastal inhabitants to migrate, the melting of glaciers that further exacerbate the rise in sea level and species extinction, and entire ecosystems facing a probable future of peril. Mountains crumble, coasts recede, animals change or disappear, and even seemingly permanent human civilizations are merely blips in geological time.

In wabi-sabi, beauty is found in accepting the transient rather than in the delusion of permanence. We learn the same thing from geography. Even though they can be unpleasant at times, Earth's changes are part of a far larger cycle of creation and destruction. The concept of wabi-sabi encourages us to see the beauty in these cycles and realise that dying is something to be accepted rather than something to resist. Per this philosophy, everything is impermanent and will eventually cease to exist, reflecting the transient nature of the planet.

The steady, unrelenting motion of the tectonic plates over millions of years is evidence of an ephemeral way of life. There was once an era on Earth where all the landmasses were united to create a supercontinent called Pangea. Fragmentation of this supercontinent took place over time due to the movement of the plate tectonics.

This resulted in the creation of the presently existing continents—Asia, Africa, the Americas, and other regions.

Therefore, the division and reformation of Pangea is the epitome of the wabi-sabi philosophy. It is very similar to Kintsugi, a Japanese art form that deliberates upon the wabi-sabi principle, wherein ceramics are shattered and then repaired with gold lining.

This process, which is sometimes invisible to unassisted sight, is a reminder of the wabi-sabi notion, which holds that beauty is found in change rather than permanence.

Earth's surface is far from flat; it is embellished by mountain ranges created by collisions, and rift valleys born out of the tearing apart action of divergence and far more fault lines than comprehensible. These imperfections, like the treasured cracks in a worn-out porcelain bowl in wabisabi, are not defects but rather emblems of the natural order. Much as the beauty of a bowl derives from its use and decay, the beauty of the Earth comes from its long history of geological change. The development, flourishing, adapting, and ultimately extinction of species have come along with the movement of these continents.

The continents can move about in the amazing movement of geological history. Perhaps they will gravitate towards each other once again to create a new supercontinent, only to drift apart once more. The essence of 'wabi-sabi' lies deeply ingrained within this eternal movement. Everything, even the Earth beneath our feet, is transient and impermanent.

Abhilasha Majumdar M/2257 Pre Sc Arts A



- The Indian transport system has a bright future ahead. The Indian government is planning to introduce bullet trains in India in the year 2026, by building the Mumbai-Ahmedabad corridor in collaboration with Japan.
- Bullet trains connect major cities of a particular country, they save a lot of time, and they are also eco-friendly and comfortable.
- The upcoming Indian bullet train is under development. It is based on the Vande Bharat platform.
 - The fastest bullet train in the world is Shangai Manglev.
- Mumbai-Ahmedabad High-Speed Rail (MAHSR) is India's first High-Speed Train Project.
 - Presently, China holds the most and the fastest bullet trains in the world

The Natural Alliance: Geography Fuels Biology

Picture credit: Green Habit

Geography and biology are two subjects which are internally related to each other. Geography provides the context of the type of area or the location and helps understand biological phenomena. This can be proved or explained with real-life cases and examples that show how geographical factors help determine biological processes. This essay delves into some examples that illustrate the symbiotic relationship between geography and biology.

The Pacific Ocean is home to one such example which would be the Galápagos Islands. Over here, many unique species have developed on their own and it is because of the geological location where they are present. The islands were generally observed by Charles Darwin and led to his theory regarding natural selection. The isolation of the islands created a 'natural laboratory' to show how geographic barriers lead to biological diversity.

On the other hand, the Amazon Rainforest hosts many species and is famous for them. Geographic features of the Amazon, like its climate and river systems, make many habitats in the place suitable for the survival of such great biodiversity. The mapping of species in the Amazon is useful for biologists so that a better understanding of the way ecological dynamics work and, as a consequence, eventual conservation methods can be linked to particular sets of environmental conditions and biological richness. The transmission and spread of Malaria in Africa is positively related to the availability of Anopheles mosquitoes in environmental factors controlling the population of mosquitoes around it, biologists and geographers can come up with focused strategies for malaria control and prevention, showcasing the importance of geography in understanding disease ecology.

It is a given fact that coral reefs thrive in tropical and subtropical waters, and they are influenced by geographical variables like the temperature of water and oceanic currents. Information requiring conservation intervention includes spatial studies of the distribution of different coral species and studies on the effects of human activities. In understanding the geographical context of coral reefs, therefore, it is imperative that geographical and biological understanding be integrated in addressing environmental challenges.

The examples mentioned above make one thing clear and that is to an extent geography needs biology for an understanding of the space within which natural processes happen and within which organisms can be distributed. These examples are shown to illustrate how important geographic factors are in shaping biological diversity and dynamics.

Varidhi Patni C/2922 Pre Sc Arts B

The Mystery of Ban Stambh

Picture credits: Adarshah

Pacific

Deesn

History is always very interesting and when we follow the tracks of history, we come across many such points in time where one remains completely astonished. One can face such an intriguing situation if he comes to Gujarat's Somnath temple.

There is a pillar in the premises of Somnath temple which is along side of the Arabian Sea. This is known as Baan Stambh. On the pillar, it is inscribed as:

" आसमुद्रान्त दक्षिण ध्रुव पर्यंत अबाधित ज्योतिर्मार्ग "

Translation - there is no hindrance in the straight line from this point to the South Pole.

The meaning of this single line, written in Sanskrit, has many mysterious meanings.

This line has a direct meaning that if you start traveling from Somnath Temple towards the South by sea, you will not meet any land until you reach Antarctica. The nearest land to the South Pole is about 9936 KM away.

Modern geographical studies have also proved that certainly there is no piece of land on this path. The other meaning is, And the most mysterious part, the term 'Jyotirmarg' means, from the point of view of spiritual texts, it means the light within, but what does it really mean here?

We can trace this stambh back to somewhere in the sixth century, where it is mentioned. However, that does not prove that it was built in the sixth century. Now the question arises who constructed this stambh? It is still uncertain however, some believe that it was first built in gold by the Moon God, Soma. Throughout its history, the temple has been rebuilt multiple times.

Compared with today's time of modern technology it was not as easy to do so 1500 years back. How did they get this knowledge? Was there any way to get Earth's 'Ariel View' in those times? If not, did the Earth's map exist at that time? Was the Somnath Temple built specifically in an exact location according to Ancient Indian science or was it the other way around. Even if we assume that knowledge of the South Pole existed, even then, how was it possible to pinpoint Somnath straight from the temple to the south side with such accuracy as to not get any land mass in between? Who and how was this mapping done?

This Stambh clearly points out that ancestors possessed this knowledge that the earth is round, and not only that but the knowledge that the earth has the South Pole & quite obviously the North Pole as well. But they also appeared to have advanced knowledge of trigonometry, architecture, Astronomy, etc. Moreover, if this is so, then we have a rich heritage of scientific knowledge but, how is it possible? There are many such unanswered questions. For now, it remains a mystery.

This is a wonderful indicator of ancient Indian knowledge. At that time when the world was merely learning how to survive; our ancestors had found a unique location indicating their advancements in science.

Sirat Markan C/2116 IX - C

A Hunger Driven Tragedy

In the heart of Zimbabwe's wilderness, a silent tragedy unfolds. Elephants, once symbols of grace and strength, are now being killed in alarming numbers, not just for their tusks, but also for their meat. A devastating hunger crisis grips the nation, pushing desperate communities to turn to these iconic creatures for survival. What was once a conservation success story is now a grim reality where hunger has forced man and beast into a tragic conflict.

Zimbabwe's food shortages, worsened by prolonged droughts and economic collapse, have left many rural communities on the brink of starvation. With crops failing and inflation soaring, the hunger crisis is at its worst in decades. For those living near national parks, the killing of elephants has become a desperate solution. These animals, essential to the country's biodiversity and tourism, are being slaughtered for both sustenance and profit, feeding the illegal ivory trade and the global demand for tusks. The rise in poaching has caught the attention of organized crime syndicates. Exploiting the economic desperation in rural areas, these groups lure locals into poaching, offering money or food in exchange for killing elephants.

What is left behind is a shattered ecosystem, further eroding the delicate balance of wildlife that sustains Zimbabwe's tourism industry—a vital source of revenue for the country. As elephants roam closer to farms in search of food, human-elephant conflicts have worsened. Farmlands are destroyed, leading villagers to view these animals as both a threat to their crops and a source of food. This deadly cycle is pushing elephants closer to extinction in Zimbabwe, further damaging the nation's already fragile economy. Without immediate intervention, Zimbabwe faces a future where both its people and its elephants are in peril. The world must act swiftly—addressing hunger, providing food relief, and stopping illegal poaching. If we fail to protect Zimbabwe's elephants, the consequences will be felt far beyond its borders, as one of nature's most majestic creatures inches closer to vanishing from the earth.

Deveshi Sharma P/2346 Pre Sc Arts A

Mapping the Economy: How Geography Shapes Global Markets

Geography plays a big role in shaping economic activities and opportunities. We can better understand why certain locations thrive while others have difficulty building their economies by knowing the relationship between Geography and Economics. Geography and economics are closely connected, and knowing how they influence each other helps us understand the world around us better. Geography isn't just about maps and physical landscapes; it also shapes economic activities and the distribution of resources, which are important components of economics.

One of the main ways geography impacts Economics is through the availability of natural resources. For example, countries with abundant resources like oil, minerals, or fertile land tend to have stronger economies because they can use these resources to generate high incomes. Saudi Arabia, for instance, is wealthy because of its oil reserves. On the other hand, countries without valuable resources, like some parts of Africa, often face challenges in developing their economies, impacting the overall development of the nation.

Geography also influences trade. Regions that are close to oceans or major rivers often develop into trade hubs because of their easy access to water routes, which are crucial for transporting goods. For example, cities like New York and Shanghai are located near coastlines, making them major global trade centers. In contrast, inland countries, like Nepal or Bolivia, have a harder time trading internationally because they lack direct access to the sea, which increases transportation costs.

Furthermore, geography affects regional economic development. Climate and terrain can make certain areas more suitable for agriculture, industry, or tourism. For instance, tropical regions may struggle with farming due to unpredictable weather and diseases, while temperate regions often have more stable agricultural conditions. These differences help explain why some parts of the world are more economically developed than others.

Aleena Khullar P/2543 X-E IGCSE

Society Activities

Geography and its Relation with Geology

On April 20, 2024, the Geography Society organized an enlightening educational activity for grade 7, focusing on "Geography and its Relation with Geology." The students prepared fascinating models highlighting the connection between the two subjects and demonstrating how their concepts are interconnected. The educational models created by the students included the Core of the Earth, Volcano, Continental Drift Theory, and Types of Rocks. The students approached the task with great enthusiasm and interest. This hands-on experience not only deepened their understanding of the relationship between two scientific disciplines but also showcased their ability to synthesize knowledge and artistic expression..





Borders and Beyond

In the planned geography society activity, students were divided into groups of 5 to 6 from grade VIII. The students were asked to reflect on the given questions after reading the given case studies on various Geopolitical impacts in different countries. Each group member was responsible for reflecting and sharing their understanding of their respective case study. After gathering the information, they jotted it down on the given sheet of paper. The activity encouraged teamwork, enhanced critical thinking ability, and fostered a deeper understanding of Geopolitical changes happening around the globe. It also helped students present their findings, which were discussed with the class.

Geoinformatics Workshop

Empowering the Future with Geoinformatics: A Transformative Workshop Experience Geography students from Mayo College Girls' School participated in an amazing Geoinformatics workshop hosted by RRSC-West Zone, NRSC/ISRO Jodhpur. Our students explored cutting-edge Geospatial technologies, including mapping, satellite imagery, and environmental monitoring. A big thank you to the RRSC west-zone scientists for their invaluable insights! This workshop has sparked a passion for Geospatial sciences and set the stage for our students to drive future innovations.



From Ground to Galaxy

The Geography Society conducted an exciting Geography-Astronomy interdisciplinary activity for the students of grade 9 on 20th April 2024. The students prepared fascinating models which projected the connection between the two subjects- Geography and Astronomy and how the knowledge of these two subjects is interconnected in many aspects. Some of the interesting models made by the students were of the moon rocks, phases of the moon, lunar eclipse and solar eclipse, solar system, black hole, space shuttle, astronaut and zodiac constellations. Throughout the activity the students' enthusiasm was at its peak. The activity proved to be an enriching one.





Let's Roll Back To The Past

In Social Studies the Class 5 children had an amazing experience of digging their past and crafting tools of the different Stone Ages like Paleolithic, Mesolithic, and Neolithic Age. They crafted some important tools like scrappers, spears, grinders, and arrow heads with clay.

It is wonderful to note that the children have realised that these tools have maintained their utility and importance even in present times.



Organic Farming

Geography Society organised a field visit for Grade 5 to the school farmland. The objective of the visit was to make children aware about the organic methods of agriculture practiced in their immediate surrounding.

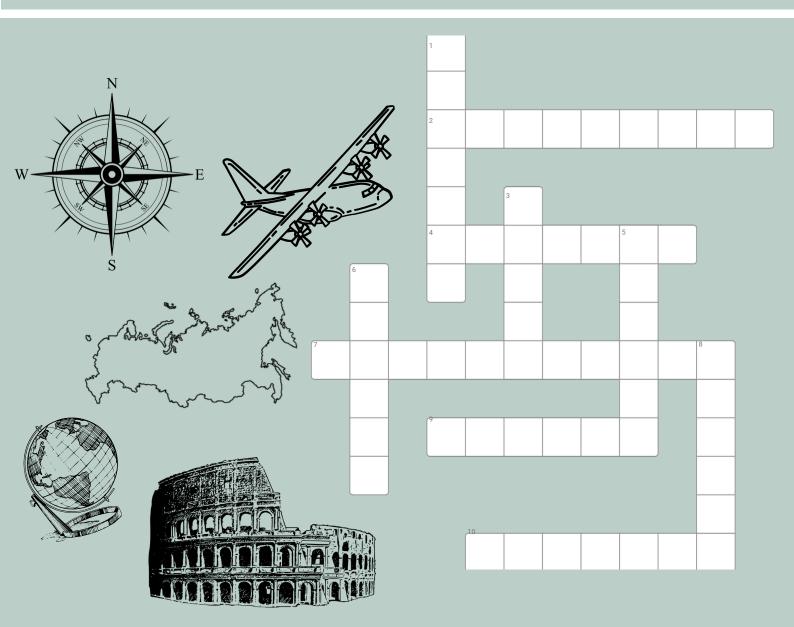
Children were introduced to two important concepts of vermicomposting and organic farming in association with sustainability. They were delighted to see variety of fruits and vegetables grown in their own school campus.

The students left the farm inspired and equipped with knowledge that will hopefully encourage them to adopt more eco-friendly practices in their own lives.





PUZZLE



DOWN

- 1.Largest slum in Asia
- 3. Only planet to spin clockwise
- 5. The US state which has the highest active volcano
- 7. The sea with no coast
- 9.Country which has more surface area than Pluto

ACROSS

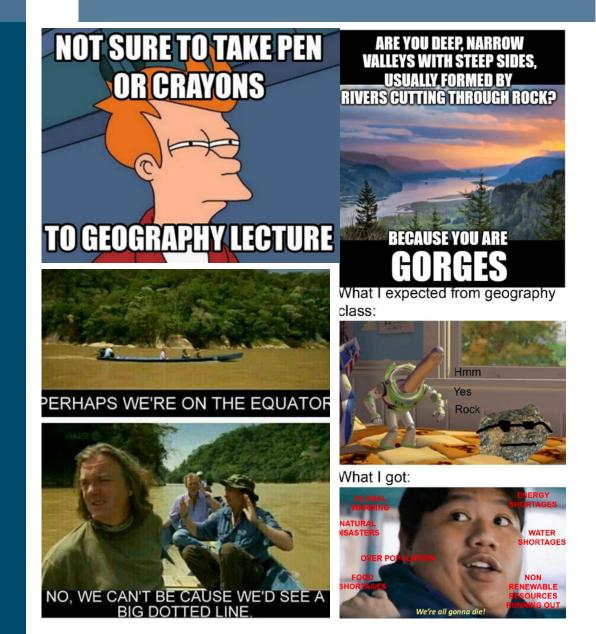
- 2.Largest rock in the world
- 4. Country with the world's
- largest cave
- 6.Largest producer of coffee in the world
- 8.Continent situated in all 4 hemispheres
- 10.Super-continent of the time

Q1. I'm the tallest mountain on Earth, standing proud and steep. Many climbers come to reach my peak. What am I? Q2. Why don't mountains get lost?

Q3. why are rivers so good at making decisions?

Q4. How does the ocean say goodbye?Q5. Why was the map always so

stressed?



ANSWERS

PUZZLE

- 1. DHARAVI
- 2. AYERS ROCK
- 3. VENUS
- 4. VIETNAM
- 5. ALASKA
- 6. BRAZIL
- 7. SARGASSO SEA
- 8. AFRICA
- 9. RUSSIA
- 10. PANGAEA

RIDDLES

Ans.1 Mount Everest Ans.2 . Because they always "peak" at the map! Ans.3 Because they go with the flow! Ans.4 It Waves Ans.5 Because it had too many issues to "navigate"!



Mayo College Girls' School Ajmer