

संजय कुमार, भा.प्र.से
सचिव

Sanjay Kumar, IAS
Secretary



भारत सरकार
शिक्षा मंत्रालय
स्कूल शिक्षा और साक्षरता विभाग
Government of India
Ministry of Education
Department of School Education & Literacy

DO No. 1-10/2024-CBSE

11th January, 2024

Dear Colleagues,

As we approach the festive season celebrating the cultural diversity and heritage of our nation, it becomes imperative for our general public and specially school children to imbibe the significance of festivals like Makar Sankranti. This festival marks the transition of the sun into the zodiac sign of Capricorn (Makara) and is celebrated across nation under various names.

2. Understanding this festival necessitates acknowledging the pivotal role of the sun in our lives—the provider of light, warmth, and life itself. Understanding the Sun is, therefore, crucial as it influences Earth's climate, sustains life, and impacts technological systems, making it vital for various aspects of our existence and advancements.

3. The success of Aadiya mission serves as a testament to our nation's commitment to exploring the depths of our solar system's core, aiming for the advancement and benefit of humanity at large. The insights gleaned from this mission hold significant practical implications in forecasting space weather, improving satellite communications, and propelling technological advancements forward. The success of the Aadiya mission can also spark inspiration among the next generation of scientists and space enthusiasts, igniting an innate passion for the realms of solar science and space exploration.

4. Makar Sankranti is an apt occasion to enlighten our young generation about India's diversity, cultural heritage and solar science. Makar Sankranti celebration correlates with scientific insights into the sun's movement, energy, and its agricultural implications, mirroring the Aadiya mission's study of the Sun's corona and its impact on Earth's climate and technology.

5. Considering the significance of Makar Sankranti, Ministry of Education, Government of India, urges and encourages all State Governments to organize various educational activities within schools to elucidate the cultural importance of Makar Sankranti while highlighting their intricate connections with solar science. A note on significance of Makar Sankranti and Aadiya Mission outlining some suggested activities that could be undertaken in schools is enclosed for your ready reference.

Contd.2/-

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6. You are, therefore, requested to issue instructions at appropriate levels to take up the above activities during the 14th -15th January 2024 in the schools. Your active involvement and collaboration in organizing and overseeing these activities in schools across your state are highly appreciated and vital in ensuring the success of this national initiative.

Best wishes

Yours Sincerely,

Enclosure: As stated above

11/1/2024
(Sanjay Kumar)

To,

Chief Secretaries of all States/UTs.

Copy to

- i. The Additional Chief Secretaries/Principal Secretaries (School Education) of all states/UTs
- ii. Chairman, CBSE.
- iii. Commissioner, KVS.
- iv. Commissioner, NVS.
- v. All Bureau Heads of D/o SE&L.

Makar Sankranti

Makar Sankranti is a festival that marks the transition of the sun into the zodiac sign of Makara (Capricorn) on its celestial path and it usually falls on January 14th or 15th. Astronomically, Makar Sankranti marks the gradual increase in the length of daylight hours in the northern hemisphere, following the winter solstice.

Astronomical and Scientific Significance

The astronomical aspect of Makar Sankranti aligns with the seasonal changes, emphasizing the cyclical nature of time and the interconnectedness of celestial events with agricultural cycles, which is deeply rooted in the cultural fabric of India. The ending of the winter solstice holds scientific importance due to its role in the Earth's axial tilt and its relationship with the length of daylight hours in different hemispheres.

As the Earth orbits the sun, the tilt of its axis causes the changing seasons. The end of the winter solstice signifies a turning point when the Northern Hemisphere starts tilting back towards the sun. This gradual shift results in an increase in daylight hours and a decrease in night time hours in the Northern Hemisphere.

The scientific significance lies in the gradual lengthening of daylight hours following the winter solstice. As the days become longer, the amount of sunlight reaching various regions increases, initiating changes in temperature and weather patterns. This change in sunlight exposure plays a crucial role in various natural processes.

Increased sunlight post-solstice gradually raises temperatures, initiating the thaw of snow and ice, heralding the arrival of spring. Longer daylight hours trigger transformations in both flora and fauna, influencing activities like flowering, migration, and breeding cycles. In agricultural regions, this transition marks the preparation for harvesting seasons, leveraging abundant sunlight for crop growth. Moreover, the extended daylight post-solstice can impact human well-being, affecting mood, energy levels, and daily routines due to heightened exposure to sunlight.

Cultural Significance

The festival holds significance because it heralds the arrival of spring, which traditionally symbolizes new beginnings, prosperity, and the onset of the harvest season. It's considered an auspicious time for spiritual practices and rituals, especially bathing in holy rivers like the Ganges, as it's believed to cleanse one's sins and bring blessings.

Makar Sankranti is primarily a harvest festival. It is a time when farmers express gratitude for a good harvest and pray for prosperity in the coming months. The festival holds cultural significance in various states of India, and it is celebrated with different names and customs. Kite flying is a popular activity during this time, particularly in states like Gujarat and Rajasthan, where colourful kites fill the sky, symbolizing joy and the arrival of spring. Lighting a bonfire is a central part of Lohri celebrations in Punjab which is similar to Sankranti. People gather around the bonfire, offer prayers, sing traditional songs, and perform folk dances like Bhangra and Giddha. It's a time for communities to come together, share sweets like rewari, gajak, and popcorn, and exchange good wishes. Lohri transcends religious and social barriers, fostering unity among people. It's a festival that brings together families, friends, and neighbours to celebrate the collective joy of the harvest season. Lohri transcends religious and social

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Pongal in Tamilnadu is a four-day long thanksgiving festival dedicated to the sun and cattle, thanking them for their contribution to a successful harvest. The first day, Bhogi Pongal, involves cleaning homes and discarding old items to signify a new beginning. The second day, Surya Pongal, involves boiling freshly harvested rice with milk and jaggery, symbolizing abundance and prosperity. The festival emphasizes unity and the renewal of relationships. Families and friends come together to celebrate, exchange gifts, and share traditional foods. It's also a time for cultural performances, music, and dance, strengthening community bonds.

India's Radiant Triumph in Solar Endeavours

India's Solar Mission Aditya, named after the Sun, exemplifies the nation's dedication to harnessing solar energy as a pivotal component of its energy strategy. Aditya is an ambitious initiative that aligns with India's broader goal of promoting renewable energy sources, particularly solar power. The Aditya Solar Mission aims to further enhance the deployment of solar technologies in the country. The mission focuses on advancing research and development in solar energy, emphasizing innovations to increase efficiency and reduce costs.

Fusion of Makar Sankranti and Solar Science for educational purposes

Leveraging Makar Sankranti as an educational platform can enlighten students about solar science and the Earth-Sun relationship, fostering curiosity about India's solar exploration endeavours through discussions tied to the Aditya mission. Makar Sankranti's celebration correlates with scientific insights into the sun's movement, energy, and its agricultural implications, mirroring the Aditya mission's study of the Sun's corona and its impact on Earth's climate and technology. Suggested activities that may be undertaken in school:

- **Workshops and Seminars:** Conduct workshops elucidating the astronomical significance of these festivals, elucidating the solar science behind these celebrations. Invite scholars and experts to engage students in discussions and presentations.
- **Cultural Programs:** Organize cultural programs where students can actively participate by showcasing traditional dances, songs, and plays associated with these festivals, incorporating the scientific aspect wherever feasible.
- **Art and Craft Activities:** Encourage art and craft sessions where students can create traditional crafts related to these festivals, accompanied by discussions on their significance in relation to solar movements.
- **Essay Competitions:** Encourage students to participate in essay writing themed around the Sun, Makar Sankranti, and the achievements of the Aditya mission. This encourages creativity while reinforcing their understanding of these concepts.
