

# **Fusion of Makar Sankranti and Solar Science for Educational purposes**

**Air Force Bal Bharati School Lodi Road, New Delhi**

**Junior School**

**Introduction:** The teaching-learning session on the scientific significance of Makar Sankranti at the junior school aimed to provide students with a deeper understanding of the festival beyond its cultural and traditional aspects. The objective was to blend cultural awareness with scientific knowledge, fostering an interdisciplinary approach to learning.

## **Content Covered:**

- **Solar Movement:** Emphasis was placed on explaining the celestial event associated with Makar Sankranti – the sun's transition into the zodiac sign of Capricorn. Students learned about the tilt of the Earth's axis and its role in the changing seasons, connecting this phenomenon to the festival's celebration during the winter solstice.
- **Harvest and Agriculture:** The link between Makar Sankranti and agricultural practices was highlighted. Students were educated about the significance of this period for farmers, marking the onset of the harvest season. The importance of solar energy in promoting crop growth and the science behind the festival's connection to agriculture were discussed.
- **Energy Conservation:** The teaching session incorporated lessons on solar energy and its role in sustaining life on Earth. Students were introduced to the concept of harnessing solar power for various purposes, promoting discussions on renewable energy sources and the environmental implications.
- **Traditional Practices:** While emphasizing the scientific aspects, the session acknowledged the cultural and traditional practices associated with Makar Sankranti. Students explored how rituals and festivities often have roots in scientific observations, fostering a holistic understanding of the festival.

**Teaching Methods:** The teaching methods employed included interactive discussions, creative writing, visual aids, and simple experiments to illustrate scientific principles. By incorporating hands-on activities, students were actively engaged in the learning process, enhancing their comprehension and retention of the material.

**Outcomes:** The teaching-learning session successfully increased students' awareness of the scientific underpinnings of Makar Sankranti. Students demonstrated improved critical thinking skills by connecting cultural practices with scientific concepts. The interdisciplinary approach contributed to a well-rounded understanding of the festival.

**Conclusion:** Integrating scientific perspectives into cultural celebrations enhances students' knowledge and promotes a holistic understanding of traditions. The Makar Sankranti teaching-learning session at the junior school exemplified how interdisciplinary education can foster a well-rounded appreciation for both cultural heritage and scientific principles





















