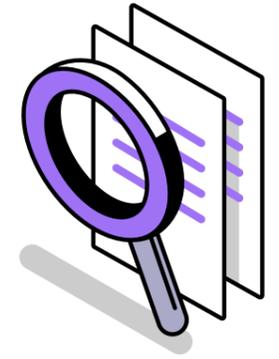




Making a Rain gauge

Module overview



This transdisciplinary module introduced children to the importance of water in daily life and the need to conserve it, with the hands-on activity of building a rain gauge as the central learning experience. The journey began with the story of *The Thirsty Crow*, using storytelling to spark curiosity and connect it to real-world observation. Children reflected on how the crow's search for water demonstrates the essential role water plays in our lives, laying a foundation for understanding it as a precious and limited natural resource.

As the module progressed, children explored the uses and sources of water, identifying both natural and man-made water bodies. Middle group children created collages using old magazines to classify and visualize these sources, helping them understand our dependence on nature and the importance of conservation.

Building on this understanding, the learning moved toward how we measure rainfall—particularly during the monsoon season. Children discovered how dams and other water systems rely on rain gauges to assess water levels and manage resources. They then constructed their own simple rain gauges using recycled plastic bottles, carefully creating measurement scales, decorating the containers, and setting them up for observation. Over time, they tracked rainfall and reflected on the changes they observed, developing early data collection and analysis skills.

Scientific understanding was further deepened through simple experiments, such as observing how a candle goes out when the air is used up, highlighting the connection between air and water. To build conceptual understanding of the water cycle, children enacted the processes of evaporation, condensation, and precipitation through movement and drama.

Language development was interwoven through playful and reflective activities, including Hindi idiom games and a Global Reading of a Hindi poem on water. These experiences helped children build water-related vocabulary and think about water usage and conservation. Children focused on visual observation and labelling everyday water uses, while also decorating their rain gauges. Children also illustrated how water is used in daily life and created charts linking their understanding to the water cycle. They built functional rain gauges, tracked actual rainfall data, and created awareness posters promoting water conservation and rainwater harvesting.

The module concluded with children designing posters featuring practical water-saving tips, which were displayed throughout the school to promote awareness and encourage action. By integrating science, language, art, mathematics, and environmental learning, this module fostered creativity, critical thinking, and a sense of responsibility—equipping children to care for natural resources in meaningful and developmentally appropriate ways.



From Story to Action: Caring for Birds



Children began with a fun memory game using objects from the story 'The Thirsty Crow'. This was followed by a storytelling session and discussion on how the crow solved its problem. Later, students explored the school campus to observe water pots kept for birds. They noted if the pots had water, which birds visited, and if the area was clean and shady. The activity helped children connect the story to real-life actions and understand the importance of caring for birds.



From story to action – children connected 'The Thirsty Crow' to real-life by observing bird water pots around the campus, learning empathy and environmental care

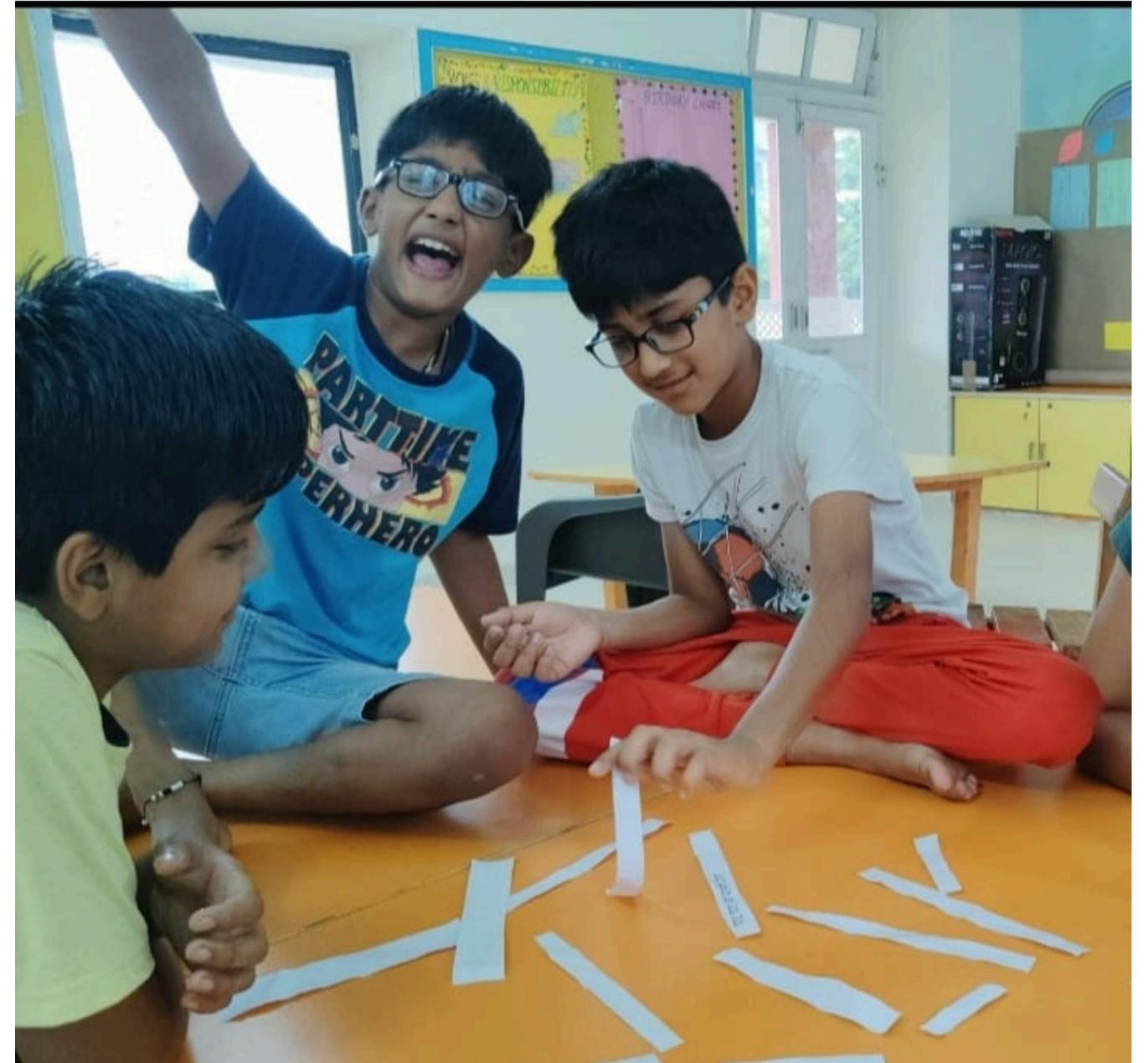
पानी in Proverbs and Poetry



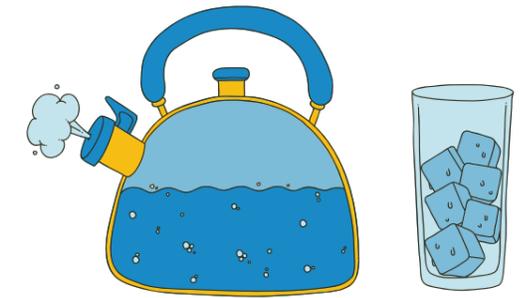
The children enthusiastically participated in a fun and educational game where they matched Hindi idioms related to water (पानी) with their correct meanings. This activity not only enriched their language skills but also deepened their understanding of everyday expressions.

Following the game, the initiator conducted a Global Reading session. A thought-provoking Hindi poem on water conservation was displayed on the projector. The initiator engaged the children by revealing and hiding parts of the poem, asking them to identify repeated words like "पानी" and inviting them to interact with the text on the screen.

To conclude, the children reflected on the message of the poem through a meaningful discussion.



Be the Matter



Children explored the three states of matter through movement—standing close as solids, flowing like liquids, and spreading out like gases. Music made it lively and interactive. In pairs, they also listed examples of solids, liquids, and gases on a sheet. Through this activity the children understood the behaviour and examples of solids, liquids, and gases through movement and collaborative writing.

Air, Fire, and Curious Minds



The children conducted a hands-on activity to observe that a candle needs air (oxygen) to burn. They placed a glass over a lit candle and noticed it went out after a while, sparking curiosity and discussion. The experiment was also linked to the states of matter. Children observed the solid form of the candle wax, the liquid wax as it melted, and the invisible gas (oxygen) that supports combustion. When the glass was placed, the limited air supply (gas) caused the flame to extinguish—reinforcing the idea that gases, though unseen, play a crucial role. The children developed scientific thinking through observation and inquiry.

Becoming the Water Cycle



The children did the kinaesthetic activity to embody the water cycle: rising up like water vapor (evaporation), squatting like clouds (condensation), and falling down like rain (precipitation). Following this, they participated in a hands-on water cycle experiment, where they made ice, observed melting and condensation, and recreated the stages of the cycle in real time. The children deepened their understanding of the water cycle through physical movement and scientific exploration, fostering both conceptual clarity and joyful learning.

Water Cycle in Action

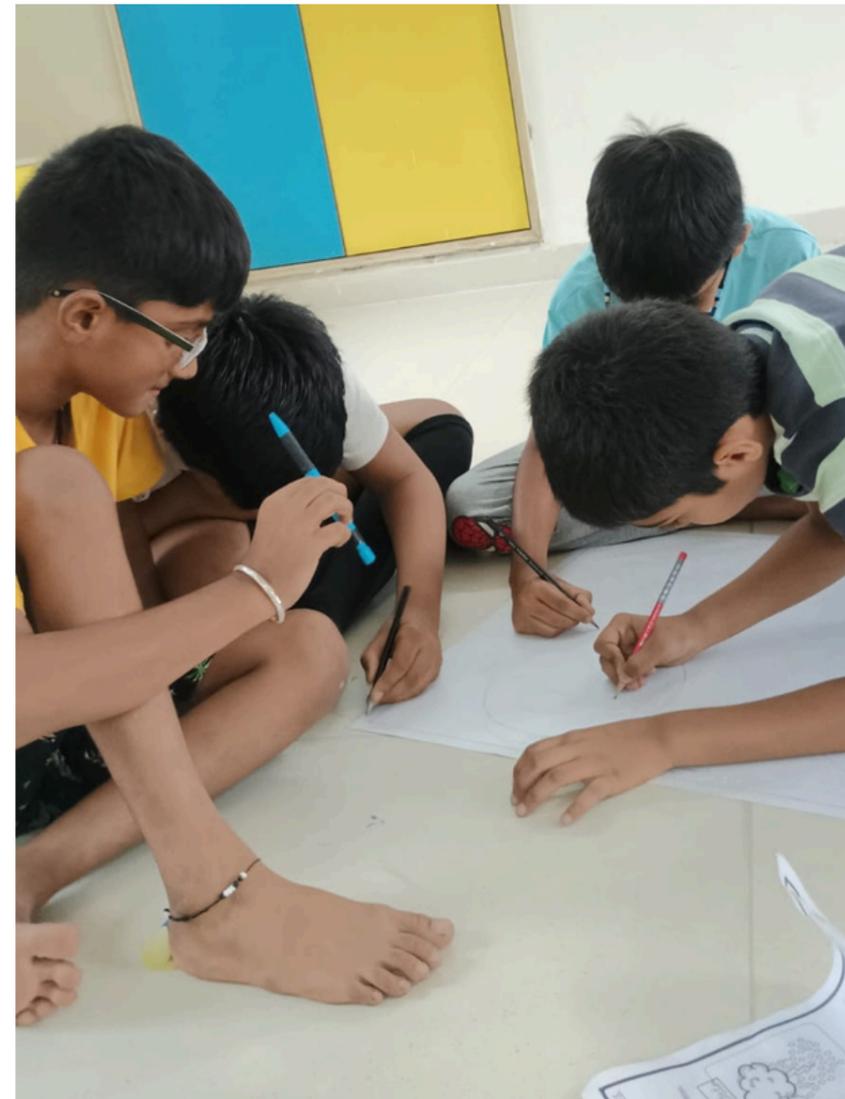


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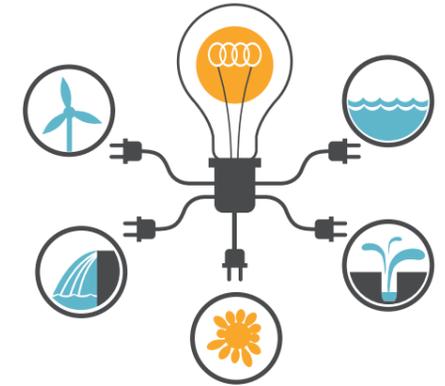
Children explored the water cycle through movement and experiment, deepening their understanding with joyful, hands-on learning.

Drawing, Building, Learning!



The children explored the water cycle through three differentiated levels of expression. The younger group collaboratively drew and labelled the stages of the water cycle on A4 sheet, building early understanding through guided illustration. The middle group worked together on a chart paper, creatively representing each stage with colour and detail. An older child extended this learning by independently designing a model, writing the entire concept and demonstrating deeper conceptual grasp and initiative. The Children engaged with the concept at their own developmental level, fostering collaboration, creativity, and scientific understanding through visual and hands-on learning.

Sources of Water



Children explored natural and man-made sources of water through fun and interactive activities.

The younger group played a “Water Says” movement game to connect water with daily actions like brushing teeth and swimming. They were introduced to water sources through simple pictures and discussion.

The middle group played “Water Charades,” acting out words like rain, pond, and hand pump. They sorted sources into natural (like rivers and lakes) and man-made (like dams and wells), learning through play and teamwork.

The older group explored the topic in more depth, discussing how natural sources like glaciers and springs differ from man-made ones like canals and artificial lakes.





Understanding Water in Our World

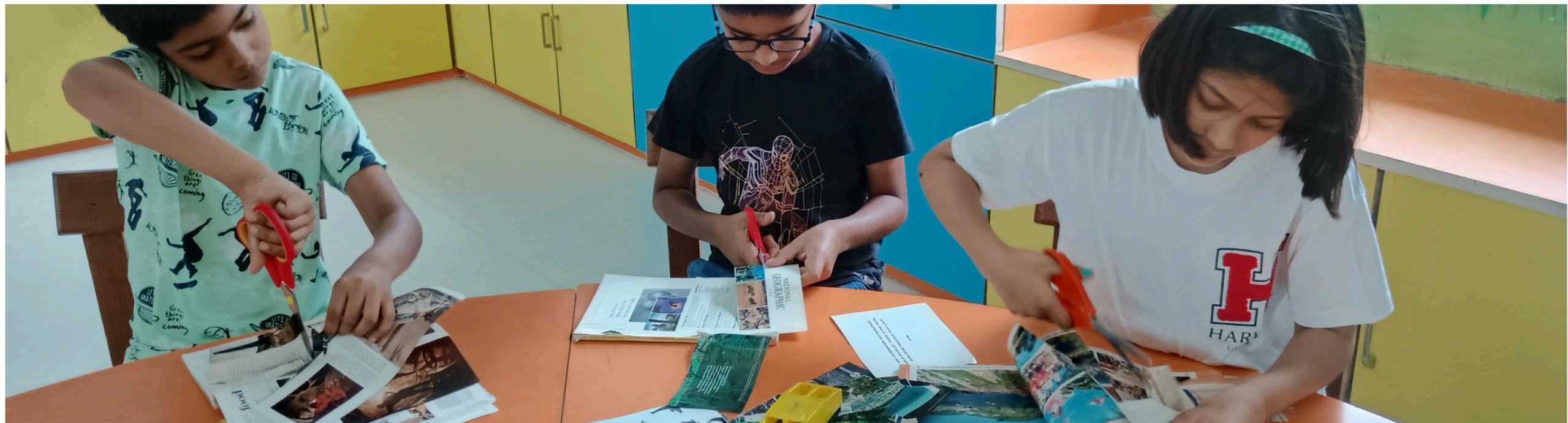


The children participated in an energizer activity that combined movement with learning. Corners of the classroom were labelled as "Natural" and "Man-Made". When names like river, well, pond, ocean or dam were called out, students quickly moved to the correct corner based on their understanding.

This interactive session helped reinforce classification skills, promoted active listening, and brought energy and fun into the classroom.

As part of their integrated learning, the children explored natural and man-made water bodies through a hands-on collage activity. Using old magazines, they carefully selected, cut, and pasted images of rivers, lakes, oceans, dams, well and reservoirs onto chart paper.

This creative process supported visual learning, fine motor skills, and environmental awareness through material reuse.





and some more pictures!

Children creating collages of water sources using cutouts from old magazines.

Exploring Jal Mahal



As part of their ongoing learning about water, the children visited the iconic Jal Mahal in Jaipur. This beautiful water palace provided a perfect setting for students to explore the importance of water bodies, ancient water management techniques, and architectural heritage.

During the visit, a tourist guide shared fascinating insights into the history of Jal Mahal and how it was ingeniously built in the middle of Man Sagar Lake. The children learned how water played a key role in the palace's construction and the methods used to manage and conserve water in olden times.

The students were also involved in a hands-on activity where they measured parts of the structure and observed the materials used in its construction.





Students measured structural elements and explored construction materials through a hands-on activity.



Children exploring the artwork and water body surrounding Jal Mahal, observing its design and natural setting.

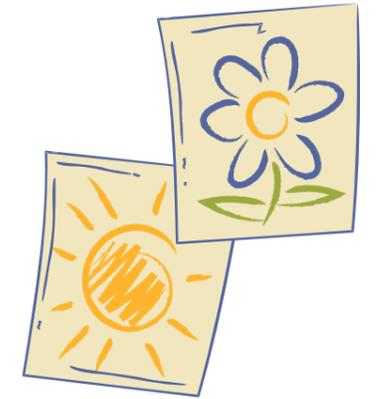


Children exploring the artwork



Children exploring different plantations present at the Jal Mahal

Creating Jal Mahal artwork



As part of our integrated learning on monuments, water, and architecture, students recreated the iconic Jal Mahal—a palace situated in the middle of a lake—using paper cutting and pasting techniques.

They observed its unique features like domes, jharokhas, and arches, and represented them using coloured paper on chart sheets. Through this, they explored Rajasthani architecture, symmetry, and the significance of water monuments.

This activity was closely linked to our rain gauge-making project, where students observed and measured rainfall. Together, these experiences helped them understand the connection between monuments like Jal Mahal, water conservation, and weather patterns—blending art, science, and cultural learning in a meaningful way.





Children collaborating and working on their artwork



Jal Mahal paper cut out artwork

Making a Rain gauge



As part of their learning journey, students explored how to create a rain gauge using simple, reusable materials. After researching different methods, they designed and built their own rain gauges using plastic water bottles.

They documented the step-by-step process on a chart, illustrating each stage with clear, informative drawings. Once the rain gauges were ready, students placed them outdoors and began observing and measuring rainfall regularly.

This hands-on activity beautifully blended research, creativity, and real-life application. It not only helped students understand how to track weather patterns but also deepened their awareness about water conservation and the value of scientific observation.





Children creating the rain gauge and observing the amount of water conserved

Reflection



The students reflected on the module of Making a Rain Gauge, where they wrote about the what, why, and how. They discussed the purpose and function of a rain gauge, how it helps in measuring rainfall, and why such tools are important in understanding weather patterns. The reflection also led to meaningful conversations around water conservation, highlighting the need to use water responsibly and protect this vital resource.



This booklet and module are the intellectual property of MGIS and GRL, and form an integral part of their educational pedagogy.