

RALLI INTERNATIONAL SCHOOL

EXPERIENTIAL LEARNING ACTIVITIES-APRIL

CLASSES- VI TO VIII

SESSION 2025-26

MATHEMATICS

CLASS VI

TOPIC: Patterns in Mathematics

INDIVIDUAL ACTIVITY



“Education is not the learning of facts, but the training of the mind to think.”

To make learning mathematics more engaging and meaningful, an Experiential Learning (EL) activity on the topic “Patterns in Mathematics” was conducted. The aim was to help students discover mathematical patterns through observation, creativity, and hands-on exploration. Students worked individually using paper, rulers, and colours to draw and extend different patterns. They created hendecagons to represent counting numbers in a growing sequence, stacked squares and triangles to visualize square numbers, and a

Koch snowflake to understand recursive pattern growth.

This activity allowed students to observe how shapes and numbers are related in structured ways. It strengthened their logical thinking, boosted creativity, and helped them understand concepts like recursion, fractals, and geometric growth. The activity made abstract mathematical ideas tangible and enjoyable through visual representation.

LEARNING

OUTCOMES:

Students were able to recognize and extend both numerical and geometric patterns. They successfully connected mathematical concepts with creative visual forms and developed logical thinking and pattern recognition skills. Through this exploration, they gained an introductory understanding of fractals and recursive growth. Most importantly, they fostered independent learning and found joy in doing mathematics with their own hands.

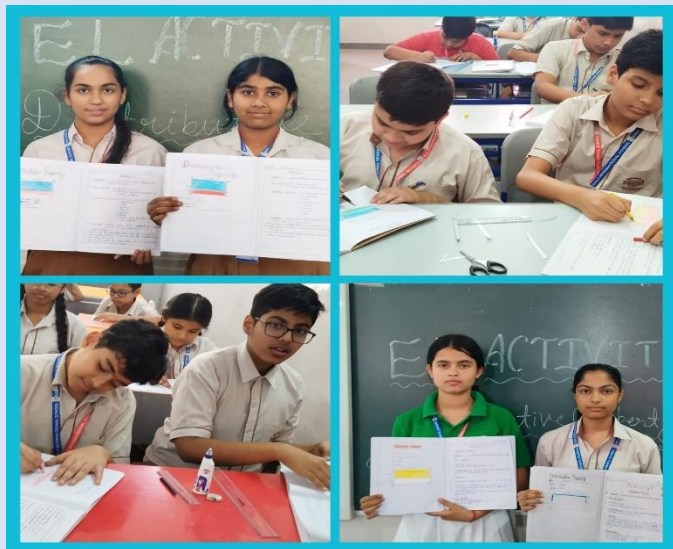


CLASS VIII

TOPIC: Distributive Property INDIVIDUAL ACTIVITY

“The only way to learn mathematics is to do mathematics.”

To bring mathematical concepts to life and foster deeper understanding, an engaging activity on the topic “The Distributive Property” was conducted. The objective was to enable students to uncover mathematical concepts through observation. Students explored the distributive property by constructing visual representations to illustrate how multiplication distributes over addition. Each student drew a rectangle with dimensions ' a ' (length) and ' $b + c$ ' (breadth). They then divided the rectangle into two adjacent smaller rectangles — one with breadth ' b ' and the other with ' c '.



LEARNING OUTCOMES:

Through this construction, students realized that the area of the original rectangle is equal to the combined areas of the two smaller rectangles. This hands-on experience helped them internalize that multiplying a number by a sum is the same as multiplying it separately by each addend and then adding the products — visually reinforcing the distributive property. It helped students move beyond rote learning to build a meaningful understanding of an important mathematical concept.



SCIENCE

CLASS VI

TOPIC: Tests of starch, fats, and proteins in the given food item

ACTIVITY: To test various nutrients in the given food items

LAB ACTIVITY

Students were taken to the science lab to observe practical tests for starch, protein, and fat in food samples. To test for starch, the teacher added iodine solution to a food sample, which turned blue-black, indicating the presence of starch. For protein, copper sulfate and caustic soda were added; the appearance of a violet color confirmed protein. To test for



fat, the food sample was rubbed on brown paper, and the appearance of a translucent spot showed the presence of fat. The activity helped students understand nutrient testing through simple methods.

LEARNING OUTCOMES: Students learned to identify starch, protein, and fat in food samples using simple chemical tests. They gained hands-on experience with the iodine solution, copper sulfate, caustic soda, and the brown paper method to test for these nutrients. This activity enhanced their understanding of the practical application of science in daily life and deepened their knowledge of essential nutrients in food.

TOPIC: Ingenious Stint – Eat Healthy Stay Healthy

ACTIVITY: Presentation on components of food, a balanced diet, and deficiency diseases through charts or collages

GROUP ACTIVITY

Students were divided into groups of 6–7 to present the components of food, a balanced diet, and deficiency diseases through charts and collages. Each group researched and reported on the nutrients found in different food items. They created collages showcasing common regional meals across India and explained the importance of balanced eating. Students also highlighted various deficiency diseases related to the lack of vitamins and minerals. Each group presented their work in front of the class, explaining their charts and collages with clarity and confidence. The teacher appreciated their efforts and provided valuable insights, making it an interactive and enriching session for all.



LEARNING OUTCOMES: Students gained a comprehensive understanding of the components of food, the importance of a balanced diet, and the effects of nutrient deficiencies. They improved their research, creativity, and teamwork skills by creating informative charts and collages. The activity also helped them develop communication skills as they confidently presented their findings and reflected on the importance of healthy eating habits for overall well-being.

CLASS VII

ACTIVITY: To observe stomata in leaves through a microscope

LAB ACTIVITY



Stomata are the small pores present in the leaves, mainly on the lower side of it, meant for gaseous exchange. Students were taken to the biology lab to identify and observe the structure of stomata under a microscope.

LEARNING OUTCOMES: Students were able to know about the structure of stomata present in leaves and were able to locate those in the slides under a microscope.

ACTIVITY: To test the presence of starch in leaves using iodine solution

LAB ACTIVITY

Starch is produced in the leaves during photosynthesis. The teacher demonstrated the activity. Students observed that the green leaves containing chlorophyll were boiled in water and then in alcohol by the teacher to remove the chlorophyll. It is done as this test is confirmed only if the chlorophyll of the leaf is removed. Some drops of iodine solution were then put on the white/colourless leaf to test the presence of starch. The leaf became black, confirming the presence of starch.

LEARNING OUTCOMES: Students learned to test the presence of starch in leaves by using iodine solution.



ACTIVITY: To observe bread mould under a magnifying glass

INDIVIDUAL ACTIVITY

Students grew fungus bread mould on bread at home over a period of four to five days. They observed the development of blackish-greenish patches on the bread as the mould began to grow. In school, students used a magnifying glass to closely examine the structure of the fungus. This hands-on activity allowed students to explore the growth and characteristics of fungi in real time.

LEARNING OUTCOMES: Students learned about the structure and growth of fungus, specifically bread mould. They developed an understanding of how fungi reproduce and observed the physical features of mould, such as its appearance and texture.



ACTIVITY: To demonstrate that a wire behaves like a magnet when an electric current is passed through it

LAB ACTIVITY

The teacher demonstrated the activity. A magnetic compass was kept near the wire carrying current, which affected it by deflecting the needle. The working of the Electric bell was shown as it works on the magnetic effect.

LEARNING OUTCOMES: Students were able to understand the magnetic effect of electric current.



ACTIVITY: To make an electromagnet using an iron nail, wires, an electric cell, and a switch

INDIVIDUAL ACTIVITY

Students took an iron nail and wrapped the wire around it. The two ends of the wire were connected to a battery for an electricity supply. As the circuit was closed, the iron nail wrapped with current-carrying wire started behaving like a magnet and attracted small iron pins. When the circuit was open, the iron nail lost its magnetism. This showed that an iron nail can behave like a magnet when an electric current is passed.

LEARNING OUTCOMES: Students were able to make an electromagnet and show its working.

CLASS VIII

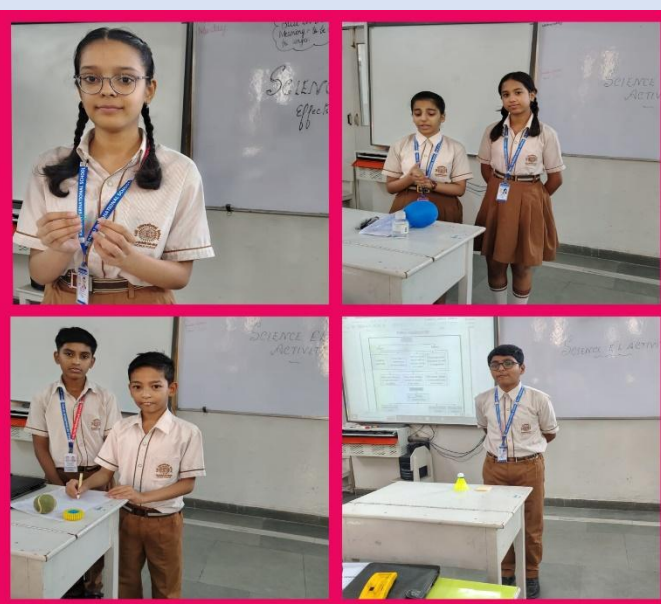
ACTIVITY: To record the effects of forces on the state of motion, shape, size, direction, and speed of the object

INDIVIDUAL ACTIVITY

The students of Class VIII participated in a hands-on science activity aimed at understanding the various effects of force. The session was designed to provide practical experience and enhance conceptual clarity on how force can change the shape, size, and state of motion of objects.

Objective: To help students explore and demonstrate the effects of force through simple, creative experiments and real-life examples.

Description of Activities: Each student prepared a demonstration that included the following:



- **Change in Shape and Size:** Students use clay models and sponge balls to demonstrate how squeezing, pressing, or stretching can alter the shape and size of soft objects.
- Balloons were inflated and then pressed to show expansion and compression due to applied force.
- **Change in State of Motion:** Students used toy cars on ramps, pushed books, and rolled marbles to show how force can start or stop motion.
- They also explained how the direction and speed of an object can be changed by applying different amounts and directions of force.
- **Real-Life Applications:** Several students presented daily life examples such as opening a door, kicking a football, or shaping dough, to show how force is constantly used in our surroundings.

Learning Outcome: The activity fostered a better understanding of the practical effects of force. Students were able to: Identify different types of forces (push, pull, contact, non-contact), understand the impact of force on an object's motion and structure, enhance communication and teamwork skills through collaborative presentations.

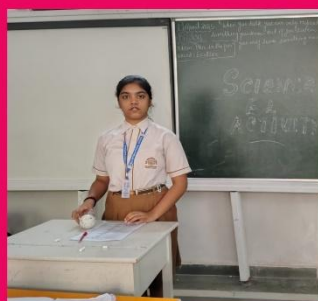
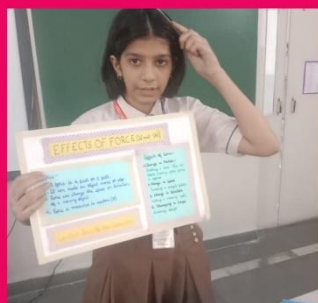
TOPIC: To demonstrate pressure exerted by water at the bottom of the container depends on the height of the column

LAB ACTIVITY

Class VIII students actively participated in a science activity to explore the concept of pressure and understand how it varies with depth, height of the column, and the role of atmospheric pressure. The objective was to provide a hands-on learning experience to clarify how pressure behaves in liquids and gases, and how these principles apply in everyday life.

Objectives:

- To demonstrate that pressure increases with depth in a fluid.
- To show that pressure at the same depth is equal at all points.



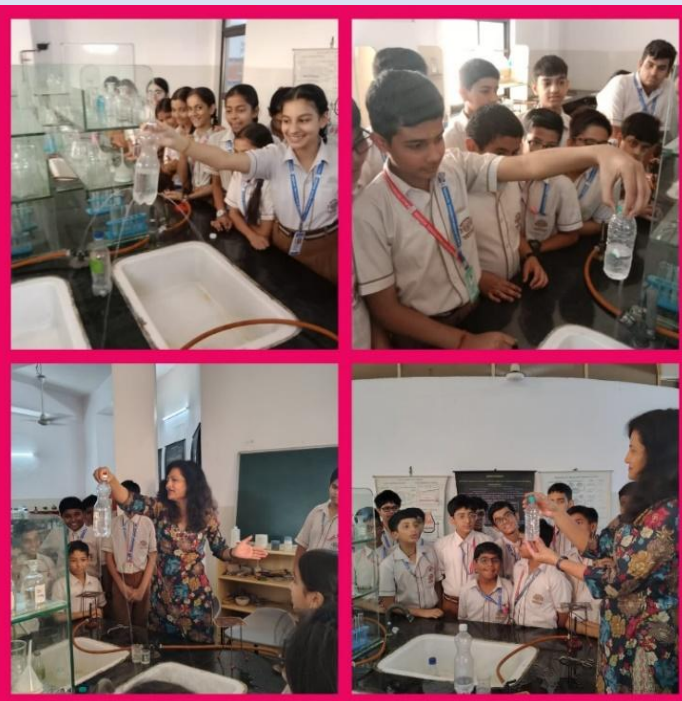
A large container filled with water was used to show that water jets from holes placed at the same level but on different sides had equal strength, proving that pressure is the same at equal depths in all directions.

Height of the Column and Pressure:

The students participated in an interactive demonstration with tubes of varying heights filled with water.

They observed that taller columns exerted more pressure, reinforcing the concept that pressure in a fluid depends on the height of the liquid column and not the volume or width.

LEARNING OUTCOMES: Students understood how pressure behaves in fluids and how it is influenced by depth and height. They discovered



- To explain that pressure depends on the height of the fluid column.
- To introduce the concept and role of atmospheric pressure in daily phenomena.

Activity Highlights:

Pressure Increases with Depth:

The students observed a practical demonstration of a water column model using plastic bottles with holes at different heights. Water jets from lower holes were observed to be stronger, illustrating that pressure increases with depth.

Same Pressure at Same Depth:



the uniformity of pressure at equal depths in a fluid. The activity encouraged critical thinking, teamwork, and application of theoretical knowledge.

SOCIAL SCIENCE

CLASS VI

TOPIC: Travel Brochure GROUP ACTIVITY

Students created travel brochures showcasing five UNESCO World Heritage Sites, including details such as the name, location, and latitude/longitude of each site. The brochures highlighted a range of cultural and natural landmarks from around the world. After completing their brochures, students exchanged them with peers to learn about various heritage sites and their cultural significance.

LEARNING OUTCOMES: Students gained knowledge about different UNESCO World Heritage Sites and their historical importance. They developed research and presentation skills, learning how to gather and present geographical information. Through the exchange of brochures, students expanded their understanding of global landmarks and the role of UNESCO in preserving cultural and natural heritage.



CLASS VII

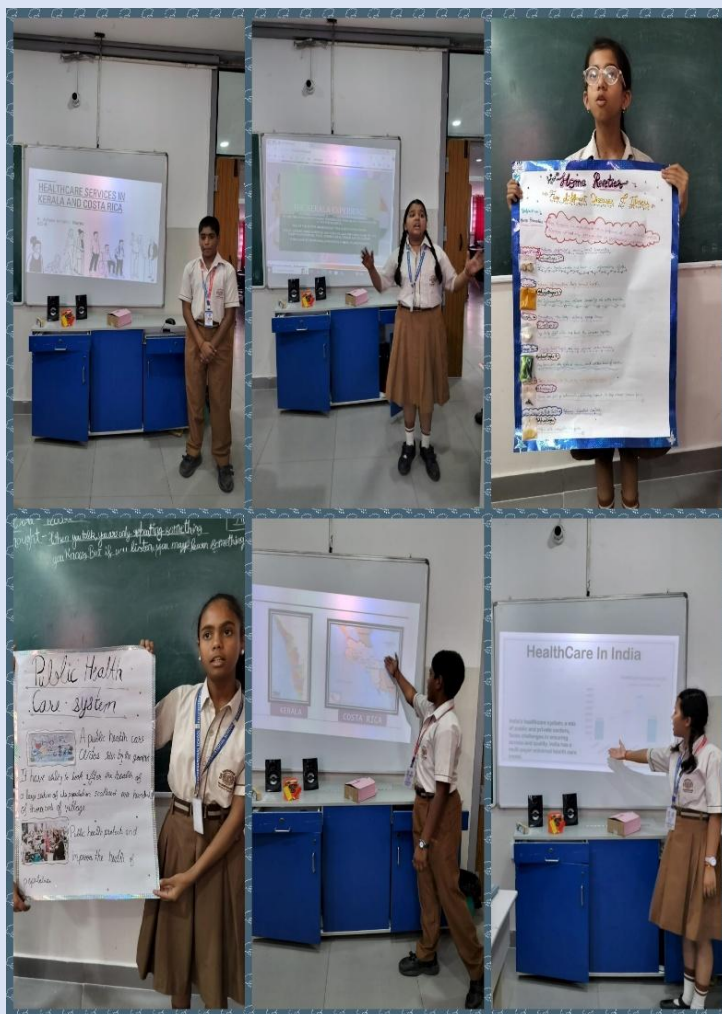
TOPIC: Prioritizing well-being

THEME: Presenting the Healthcare System

INDIVIDUAL ACTIVITY

Students were assigned different topics based on the Indian healthcare system. They had to create a PowerPoint Presentation or a chart on the given topic and present it in class. Students explained about the private and public healthcare systems in their PPTs and charts, followed by a discussion on comparing them. Students also gathered analytical information on the healthcare systems of Kerala and Costa Rica, like how much money their governments spend on healthcare services, etc., and drew a comparison between both of them. Through this activity, students showcased their analytical and creative skills and enhanced their presentation skills as well.

LEARNING OUTCOMES: Through this activity, students developed a deeper understanding of the Indian healthcare system, comparing public and private sectors and analyzing global healthcare models like those of Kerala and Costa Rica. They enhanced their research, analytical, and presentation skills by gathering information on government healthcare spending and presenting it creatively through PowerPoint presentations and charts. The activity encouraged critical thinking and fostered a greater awareness of global healthcare systems, improving their ability to compare and contrast different approaches to public health..



CLASS VIII

TOPIC: "Every date, a new slate"

GROUP ACTIVITY

Students were assigned to work in pairs on various historical topics. Group 1 created a PowerPoint presentation on the laws and policies introduced by the Governors-General of British India, analyzing the impact of these reforms. Group 2 made a PPT or collage on advertisements from the 1920s, exploring how marketing reflected the cultural and socio-economic conditions of that era. Group 3 focused on the National Archives of India, detailing its role in preserving historical documents.

Group 4 took a personal approach by interviewing a family member to learn about their life. They divided the individual's life into different periods, highlighting key events in each period and explaining the basis of their periodization on an A4 sheet.



LEARNING OUTCOMES:

Students developed research and analytical skills by exploring historical topics, gaining a deeper understanding of the laws and policies introduced by the Governor-Generals of British India and their long-term impact. They learned to analyze advertisements from the 1920s, linking them to the cultural and socio-economic context of the time, and compared them with modern-day marketing techniques. Additionally, students explored the role of the National Archives of India in preserving historical documents, deepening their appreciation for archival preservation.



संस्कृत

कक्षा - 6

गतिविधि प्रार्थना श्लोक वाचन

एकल गतिविधि)

कक्षा 6 के दो वर्गों (C, D) में "प्रार्थना श्लोक वाचन" की गतिविधि आयोजित की गई, जिसमें सभी विद्यार्थियों ने उत्साहपूर्वक भाग लिया। विद्यार्थियों ने संस्कृत में श्लोकों का वाचन किया, और कुछ विद्यार्थियों ने श्लोकों का गायन लयात्मक रूप से किया। साथ ही, श्लोकों के अर्थ को भी समझाया गया, जिससे विद्यार्थियों को श्लोकों का गहरा ज्ञान हुआ और उनकी भाषा समझ में भी वृद्धि हुई। इस गतिविधि ने विद्यार्थियों के आत्मविश्वास को बढ़ाया और उन्हें संस्कृत भाषा में रुचि विकसित करने का अवसर प्रदान किया।



अधिगम परिणाम : इस गतिविधि के माध्यम से विद्यार्थियों की भाषा और अभिव्यक्ति क्षमता में सुधार हुआ। श्लोकों के अर्थ को समझने से उनका ज्ञान बढ़ा और संस्कृत के प्रति रुचि विकसित हुई। इस गतिविधि ने विद्यार्थियों का आत्मविश्वास बढ़ाया और उन्हें सांस्कृतिक महत्व को समझने का अवसर मिला।

कक्षा - 7

गतिविधि वार्तालाप:

सामूहिक गतिविधि



कक्षा 7 के दो वर्गों (B, C) में संस्कृत वार्तालाप अभ्यास की गतिविधि आयोजित की गई, जिसमें विद्यार्थियों ने अपनी इच्छा और समझ के अनुसार वार्तालाप किया। इस गतिविधि में विद्यार्थियों ने उत्साहपूर्वक भाग लिया और प्रत्येक छात्र ने संस्कृत में वार्तालाप का अभ्यास किया। विशेष ध्यान छात्रों के उच्चारण पर दिया गया, जिससे उनकी भाषा की शुद्धता में सुधार हुआ। विद्यार्थियों ने मित्रों के बीच वार्तालाप

को अभिनयात्मक शैली में प्रस्तुत किया और समूह के विचार अनुसार, उन्होंने प्रतिदिन उपयोग होने वाली वाक्यावली का चयन किया।

अधिगम

परिणाम:

इस गतिविधि ने विद्यार्थियों में आत्मविश्वास, शब्द भंडार में वृद्धि, और वाचन शैली में सुधार किया। अभिनयात्मक शैली और विचारात्मक शैली के माध्यम से विद्यार्थियों की वर्तालाप क्षमता और समझ को बढ़ावा मिला। इस गतिविधि से संस्कृत में सहजता से वर्तालाप करने का अभ्यास हुआ।

कक्षा - 8

गतिविधि लघु नाटिका

सामूहिक गतिविधि

कक्षा 8 के वर्गों (B, C, D) में पंचतंत्र की कहानियों की प्रस्तुति की गतिविधि आयोजित की गई, जिसमें विद्यार्थियों ने अपनी इच्छा और समझ के अनुसार कहानी का चयन किया। छात्रों ने उत्साहपूर्वक भाग लिया और कहानी से संबंधित मुखोटे और अन्य सामग्री का निर्माण कर इसे और रोमांचक बनाया। उच्चारण पर विशेष ध्यान दिया गया, और पंचतंत्र की कहानी को अभिनयात्मक शैली में प्रस्तुत किया गया। समूहों ने मिलकर संवाद लेखन किया और कुछ छात्रों ने पीपीटी बनाकर नाटिका की प्रस्तुति दी।



अधिगम परिणाम: इस गतिविधि ने विद्यार्थियों के शब्द भंडार में वृद्धि की और उन्हें अभिनय, विचार और वाचन शैली में सुधार करने का अवसर मिला। नाटिका के माध्यम से उन्होंने रचनात्मकता और टीमवर्क के कौशल में वृद्धि की, साथ ही संवाद और प्रस्तुति के लिए आत्मविश्वास भी प्राप्त किया।

COMPUTER SCIENCE

CLASS VI

TOPIC: AI Meets Human Intelligence: Understanding Our Brains

PAIR ACTIVITY

to integrate creativity and technology in education, a PowerPoint Presentation (PPT) making activity was conducted on the topics "Types of Intelligence" and "AI Approaches." The objective of this activity was to foster research skills, enhance digital literacy, and improve students' understanding of modern concepts related to science and human behavior. Students were divided into small groups and given the option to choose one of the two topics. They researched the topics using textbooks and the internet, gathered information, and created their presentations by typing short sentences or bullet points.

To enhance their PPTs, students incorporated visuals such as pictures, icons, and diagrams, using various slide layouts and background colors. Additionally, students creatively applied animations and transitions to make their presentations more engaging. This activity not only helped students grasp the fundamentals of different types of human intelligence and AI but also provided a practical opportunity to develop their presentation and technology skills. It was a successful learning experience that blended academic content with essential 21st-century skills.

LEARNING OUTCOMES: Through this activity, students were able to develop a better understanding of the various types of intelligence and how artificial intelligence works. They enhanced their research and critical thinking skills by gathering and organizing information effectively. The PPT making process helped improve their digital literacy, giving them hands-on experience in using technology to present complex concepts. Furthermore, the creative use of design elements, animations, and transitions allowed students to express their ideas in an engaging manner, fostering both creativity and communication skills.

