



## Report on "Diya Dynamics: Exploring 3D Geometry through Art"

**Grade: 8**

**Date: 28th October 2024**

**Venue: Respective Classrooms**

### Objective

The diya-making activity was organized to celebrate Diwali, fostering creativity, cultural learning, and enhancing students' understanding of geometry. This hands-on experience encouraged students to explore the art of diya-making while applying mathematical concepts by calculating the volume of a hemispherical diya.

### Details of the Activity

The activity began with an introduction to the cultural significance of Diwali and the role of diyas in Indian traditions. Students were guided in crafting diyas from clay, utilizing various techniques to mold and shape them. They expressed their creativity by decorating the diyas with paint, glitter, and other embellishments, embracing the festive spirit.

In addition to the artistic component, students engaged in a mathematical exploration of their creations. Each diya was shaped approximately like a hemisphere, allowing for a practical application of geometry.

### Mathematical Application

To calculate the volume of their diyas, students measured the radius of their crafted designs. They applied the formula for the volume of a hemisphere:

$$\text{Volume of a Hemisphere} = \frac{2}{3} \pi r^3$$

This hands-on calculation helped reinforce their understanding of geometric principles in a real-world context.

### Conclusion

The Diwali diya-making activity successfully blended cultural celebration with practical learning. Students enjoyed the creative process while deepening their understanding of volume through hands-on experience. This activity highlighted the connections between art, tradition, and mathematics, enriching students' appreciation for interdisciplinary learning.



