

SATISH CHANDRA MEMORIAL SCHOOL

STD VIII

WORKSHEET

MENSURATION

CASE STUDY 1:



The Mysterious Cube:

By solving a series of puzzles, a group of adventurous students unlocks a secret door leading to a hidden chamber. Inside, they find a large, mysterious cube. The cube has a volume of 216 cubic units. What is the length of each side of the cube? Find the total surface area of the cube.

CASE STUDY 2



The Ice Cream Shop:

The local ice cream shop is a cylindrical building with a height of 10 feet and a diameter of 6 feet. If the shop owner wants to paint the entire outside surface of the building, including the top, how much paint will be needed? (Assume that there is no door or windows on the outside surface)

If the cost of per square feet paint is Rs 10, find the total cost for painting.

CASE STUDY 3

The Chocolate Surprise:

A chocolate shop is making cylindrical chocolate bars for a special promotion. Each chocolate bar has a radius of 3 cm and a height of 10 cm. If the shop wants to wrap each chocolate bar with a rectangular wrapper, how much wrapping paper will they need to wrap 50 chocolate bars?

CASE STUDY 4



Tom wants to build a cuboidal fish tank for his pet fish. The tank needs to have a length of 80 centimeters, a width of 40 centimeters, and a height of 30 centimeters. How much glass does Tom need to buy to build the tank, considering the glass will cover all sides including the bottom.

CASE STUDY 5

The Rubik's Cube Challenge:



Emma loves solving Rubik's cubes. She has a Rubik's cube with sides measuring 6 centimeters each. If she wants to cover the entire cube with stickers, how many square centimeters of stickers does she need?