

Mensuration

Focus spot

Total surface area of a solid made up by different solids

Why

Students do not have clear idea about differences in total surface area and curved surface area of a solid. They cannot comprehend that total surface area of a solid comprises of its curved surface area, floor area and area of roof. Moreover, they cannot visualize that when two solids are joined then the area of common surface between them does not make any surface of the combined solid.

Impact

While finding total surface area of a combined solid, by mistake students add up total surface areas of all the solids by which it has been formed. For this the common surface between two solids which are joined gets counted twice whereas it should not be counted at all.