

SUBJECT: MATHEMATICS

CLASS: VIII

CHAPTER 11 : MENSURATION.

EXPERIENTIAL LEARNING ACTIVITY:

MATERIALS REQUIRED:

A cuboidal box, a pair of scissors and glue.

Derive the formula for total surface area of a cuboid.

* Take an empty cuboidal box and label its length, breadth and height as ℓ , b and h respectively.

* Colour each pair of opposite faces with different colours eg(red,blue and green)

*Cut out the six faces using a pair of scissors.

* Paste the six faces on a sheet of paper. (fig.ii)

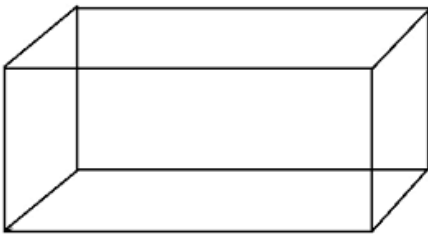


fig.(i)

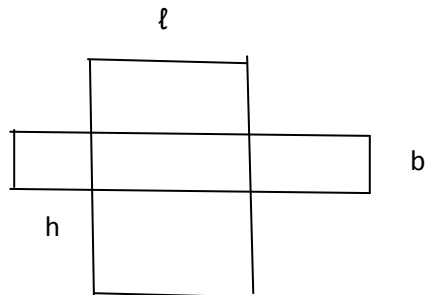


fig.(ii)

* Find the area of each face.

* add the area of all faces. This will give the total surface area of the cuboidal box.

Area of each red face = _____ Sq.Units.

Area of each blue face= _____ Sq. Units.

Area of each green face = _____ Sq. Units.

Total surface area = 2(area of red face+ area of blue face + area of green face)

= 2 (_____ + _____ + _____)

CURIOSITY QUESTION:

* What is the total surface area of a cube and right circular cylinder?

ANSWER GUIDE:

*What is a cube?

* Calculate faces of a cube or dice?