

Knowing how to calculate the surface area of a prism is useful in all sorts of ways, like knowing how much paper is needed to decorate a box.

For this rectangular prism, the surface area can be calculated using the front, top and side.

It's not necessary to measure all six sides, because in a rectangular prism each opposite side is the same: top and bottom, back and front and left and right are equal to each other.

Work out the area of the three surfaces, by multiplying length and breadth.

Five times four is twenty.

Five times three is fifteen.

Four times three is twelve.

Then add the three surface areas together, twice, giving us our six sides of the prism.

Twenty plus twenty for front and back.

Fifteen plus fifteen for top and bottom.

Twelve plus twelve for left and right.

Which comes to 94 square centimetres.

Looking at the net shown, the formula of the surface area can also be expressed as:

Two times, brackets, length times height, plus length times breadth, plus height times breadth.

Remember the opposite sides of a rectangular prism have the same area, so measure three sides and double them.