**MATHEMATICS PROJECT**

**CLASS: 8**

**TOPIC: AREA OF A PARALLELOGRAM**

**OBJECTIVE:** To find a formula for the area of a parallelogram

**PRE-REQUISITE KNOWLEDGE:** Formula for the area of a parallelogram

**MATERIALS REQUIRED:**

1. Geometry box
2. Practical workbook
3. Coloured chart papers – yellow, blue and red
4. Scissors
5. Scale
6. Sketch pen
7. Adhesives or glue sticks
8. Tracing papers – 2

**PROCEDURE:**

1. Draw any parallelogram of base *b* and height *h* on a yellow coloured chart paper.





1. From A draw AE perpendicular to DC. Place a tracing paper on the parallelogram ABCD. Trace out $∆A DE. $
2. Place the tracing paper on a blue chart paper. Trace and cut the triangle $∆A DE$ from it.



1. Similarly with the help of the tracing paper, trace out the remaining portion of the parallelogram ABCD on it (quadrilateral ABCE).
2. Now place the tracing paper on a red chart paper. Trace and cut the quadrilateral ABCE from it.



1. Now paste the quadrilateral ABCE and $∆A DE$ on the yellow chart paper as shown in the figure.



1. We get the rectangle ABDE.
2. Hence area enclosed by the parallelogram ABCD and the rectangle ABDE are equal.



 **RESULT:**

Area of the parallelogram ABCD = area of the rectangle ABDE = $b ×h=base ×height$

**LAST DATE OF SUBMISSION OF PROJECT: 15th July, 2017**