

MATH ACTIVITY CENTRE ON AREA OF A CIRCLE

CLASS VII

SUBJECT : MATHEMATICS

AIM : TO DERIVE THE FORMULA OF AREA OF A CIRCLE

MATERIALS REQUIRED : COLOUR PAPER, COMPASS, SCALE, PAIR OF SCISSORS, GLUE STICK

PROCEDURE : A Circle is drawn and the two different sides of the circle are coloured with two different colours. The circle is divided into 16 equal sectors and they are cut using scissors. These 16 parts are stuck alternately so that it forms a rectangle.

OBSERVATION : When a circle is divided into a large number of equal sectors and these sectors are arranged, they almost look like a rectangle. The length of the rectangle is half of the circumference circle and breadth is the radius of the circle.

CALCULATION : Area of the circle = $\frac{1}{2}$ of circumference x radius

$$\text{Area} = \frac{1}{2} \times 2\pi r \times r = \pi r^2$$

