Revision Notes

CHAPTER – 13

SYMMETRY

- A figure has line symmetry if a line can be drawn dividing the figure into two identical parts.
- The line is called a line of symmetry.
- A figure may have no line of symmetry, only one line of symmetry, two lines of symmetry or multiple lines of symmetry. Here are some examples.

Number of lines of symmetry	Example
No line of symmetry	A scalene triangle, Alphabet R
Only one line of symmetry	An isosceles triangle, A kite
Two lines of symmetry	A rectangle, A rhombus
Three lines of symmetry	An equilateral triangle, A square

Line of Symmetry:

- A figure is said to have line symmetry, if by folding the figure along a line, the left and right parts of it coincide exactly. The line is called the line (or axis) of symmetry of the figure.
- A figure may have no line of symmetry, one line of symmetry, two lines of symmetry, three lines of symmetry and so on.

Reflection and Symmetry: The line of symmetry is closely related to mirror reflection. When dealing with mirror reflection we have to take into account the left $\leftrightarrow$right changes in orientation.

Application in every day life: Symmetry has plenty of applications in every day life as in art, architecture, textile technology, design creations, geometrical reasoning Kolams, Rangoli etc.