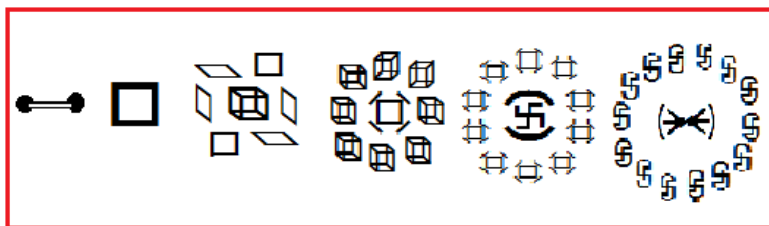


VEDIC MATHEMATICS

&

MODERN MATHEMATICS

SATHAPATYA MEASURING ROD



(HYPER CUBES 1 TO 6)

Consolidated Steps of learning and teaching of Vedic mathematics, Science & Technology

STEP – 9

Geometric envelopes

1. Ninth learning and teaching step of Vedic mathematics, Science & Technology is about the geometric envelopes.
2. The boundary fold constitutes a set up of a geometric envelope for the domain fold.
3. Boundary fold as well is a manifested space content lump of the concerned space.
4. In reference to hyper cube-n, while n-Space content lump manifests domain fold, at the same time (n-1) space content lump manifests boundary fold.
5. As such, boundary fold, as a space content lump manifesting as domain fold (of n-1 space set up) shall be accepting a measuring rod of the set up of bodies of 0-Space to (n-1) space
6. With $n = 3$, namely hyper cube-3 set up, while 3-Space content lump shall be manifesting as domain fold, 2-Space content lump shall be manifesting as boundary fold and it as 2-Space domain fold shall be accepting a measuring rod constituted by 0, 1 and 2 space bodies.
7. This measuring rod synthesized by 0, 1 and 2 space bodies, in the context of 2-Space in the role of boundary of 3-Space shall be constituting a geometric envelope synthesized by points (corner points), intervals (edges) and squares (surfaces) of cube.
8. These together namely corner points, edges and surface plates together stitch a geometric envelope for cube / hyper cube-3.
9. There are 8 corner points, 12 edges and 6 surfaces being together 26 constituents of geometric envelope of cube / hyper cube-3.

10. These 26 constituents of geometric envelope of cube together with volume as integrated single unit make out a set up of 27 constituents.
11. One may have a pause here and take note that the TCV (घनः) = 27
12. Still further it also would be relevant to take note that volume is integrated in terms of a three dimensional frame which contributes three dimensions and fourth origin.
13. This way $27 + 3 = 30$ and $27 + 4 = 31$, make out a pair of set ups.
14. First set up as of 30 components is the set up of a framed domain of hyper cube-3 with sealed origin.
15. The second set up of 31 components is the framed domain of hyper cube-3 permitting transcendence at the center / origin.

