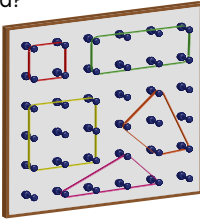


## Ideas for Maths activities

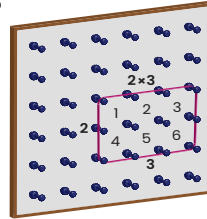
### Making Shapes and Polygons

- Can you make a triangle?
- Can you make a square?
- Can you make different shapes (4 sides, 5 and so on till 12-gon)?
- What is maximum size of triangle you can make?
- What minimum size of triangle can you make?
- Which regular polygons can you make on this grid?



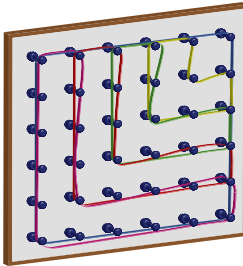
### Counting and Multiplication

- Can you make rectangles and count squares in it?
- Can you counting all 4-side shapes (tetragons) within a rectangle?
- Can you make a polygon by combining more shapes?
- Can you make rectangle of  $(m \times n)$  size?
- Can you find area of  $(m \times n)$  rectangle?
- How concept of area relates to multiplication?



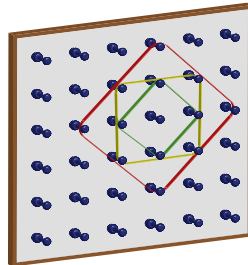
### Computing Area and Perimeter

- Can you find area of tetragons?
- Can you find area of (right angle) triangles?
- How triangle area is related to rectangle?
- How different triangles may have same area (e.g. where base and height is same)?
- How shapes of same perimeter may have different area?
- How shapes of same area may have different perimeter?
- How can area be measured (usually by addition) sometimes by subtraction?



### Making Patterns in Space

- How can you make various patterns for space filling?
- How can you double a square?
- How can you half a square?
- How can you fill a polygon with triangles?
- How can you fill a polygon with similar polygons?
- How can you fill a polygon with different polygons?
- Can you make two similar polygons.



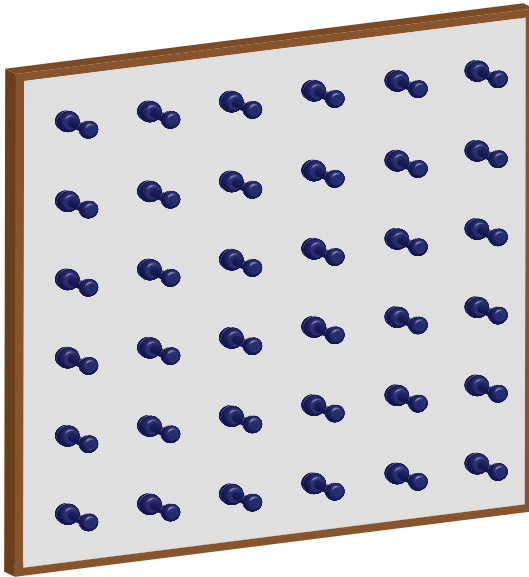
**NOTE:** These are sample activities to start learning Maths fun with this tool.

Many interesting ideas on Maths-learning activities are given in booklets (to be separately purchased). The content of booklet are research based, designed for accelerated learning)

# Geoboard

(Product ID: LAB -005)

For **8** years and above



Contains a 6 by 6 pegs geoboard and a user manual

### Color Scheme, Shape, and Quantity:

A square shaped white base with thirty-six primary color pegs

### Dimensions:

7.5" x 7.5" x 0.75"

### Materials:

Wooden base with plastic pegs

Things required for activities:

- Rubber Bands of assorted colors (not provided in the set)

### Uses for learning and intellectual development :

- For making different patterns in a plane (2D) space
- Learning concept of plane, grid, intersection point, horizontal, vertical
- Making lines, intersection of lines, parallel lines, perpendicular lines, transversal lines
- Learning counting and multiplication
- Making polyominoes – how same area can have different orientations in space
- Orientation and symmetry of shapes in a plane
- Area and perimeter, how those are related and different
- Dissections and combinations of 2D shapes
- String art and making patterns with it
- Transformation of 2D shape – a polygon into another shape
- Learning fractions – parts and whole
- Random walks & lattice polygons
- Making puzzles – e.g. how many shapes within a shape, how many paths from point 'a' to 'b'

### Safety & Quality:

This tool is safe to use. It is light-weight and has no sharp edges. No harmful substances have been used in making it. It is safe for children of recommended age.

### Support:

For any feedback, suggestion, query or complaint, please contact.

### Environment:

We are conscious of impact of our activities on nature. The objective behind making re-usable tools with local materials is to minimize its impact on environment for a sustainable living of human and non-human species.

Email:

hr@elements-learning.com