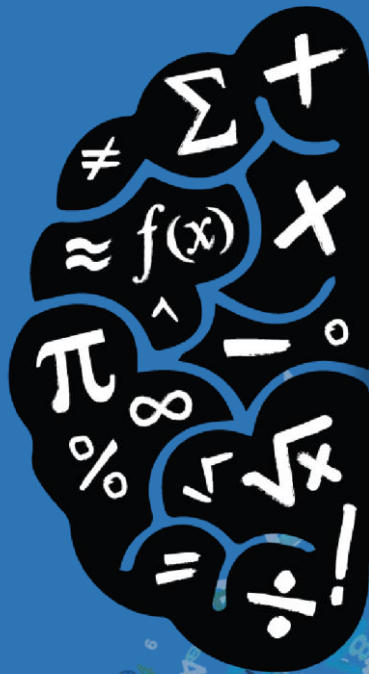




# AMIGO STATIONERY



## MATH KIT



*"Making math fun to learn"*

# Why Choose Amigo?



In Amigo we know math could be a difficult task for both parents and children, but it doesn't have to be with the correct tools. A math manipulatives kit can turn the sometimes long and tricky process of learning math into an enjoyable experience that will leave your child excited and motivated while they learn valuable skills that they'll use throughout their life.

With so many educational toys on the market, how do you know which one is right for your family? Read further, as we review all the different types of manipulative kits available in order to help you find out what is best for you and your students!

Math manipulatives kit are physical objects that are used to teach and practice mathematical concepts to students.

For visual and kinesthetic learners—those who learn best by seeing and doing—math manipulatives can be especially beneficial.

They can be applied in a range of contexts, such as classrooms, homeschools, and tutoring sessions.

# We believe with our math manipulatives kit

1) Children can learn crucial skills like problem-solving, critical thinking, and spatial reasoning by using math manipulatives.

2) Children can benefit greatly from math manipulatives because they enable hands-on exploration and physical manipulation of mathematical ideas.

3) Children may find it simpler to comprehend and remember the ideas as well as to see how they can be applied in actual circumstances as a result.

4) Math manipulatives can be a useful tool for encouraging kids to gain a deeper appreciation for and understanding of math.

5) Math manipulatives can also be entertaining and interesting, which can keep kids interested in math lessons.

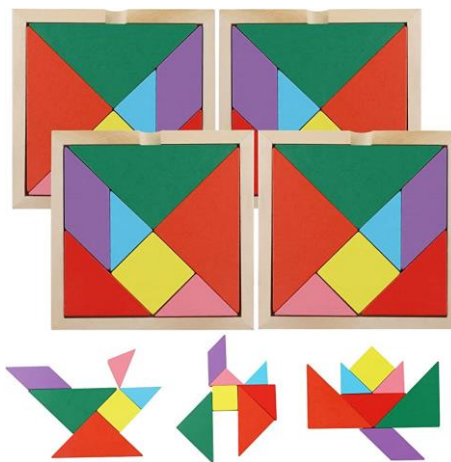
Thank you



## Tangram

is a deceptively simple set of seven geometric shapes made up of five triangles (two small triangles, one medium triangle, and two large triangles), a square, and a parallelogram.

When the pieces are arranged together they suggest an amazing variety of forms, embodying many numerical and geometric concepts.



### Play and learn

- The More, The Better
- Making a Quilt
- Polygon Parade
- Square Cover-Up
- Fraction Spin
- Cover and Count



In addition to creating shapes, younger children can work to fit Tangram pieces into shapes on puzzle cards. Children can gain familiarity with geometric figures while developing spatial reasoning abilities.

The intermediate grades can use Tangram not only to explore and create shapes, they can also learn about relationships among shapes.

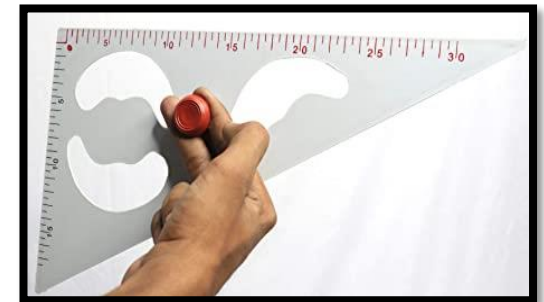
Tangrams help students at the middle grades develop spatial-visualization skills and introduce geometric concepts such as congruence, similarity, symmetry, etc. Students use them to compute the area of



## Teacher Geometry box

gives access to all tools, which can be easily used on board, to teach concepts related to geometry. The set contains

- D-Shaped Protractor
- Adjustable Compass
- Divider
- Ruler
- Pair Of Set Squares
- Duster.



All items are made from durable plastic material

# %

**Geoboard** is a mathematical manipulative used to explore basic concepts in plane geometry such as perimeter, area and the characteristics of triangles and other polygons

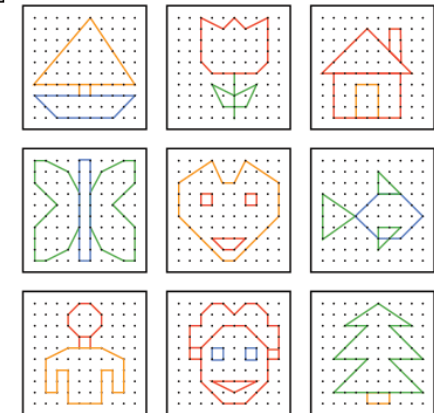
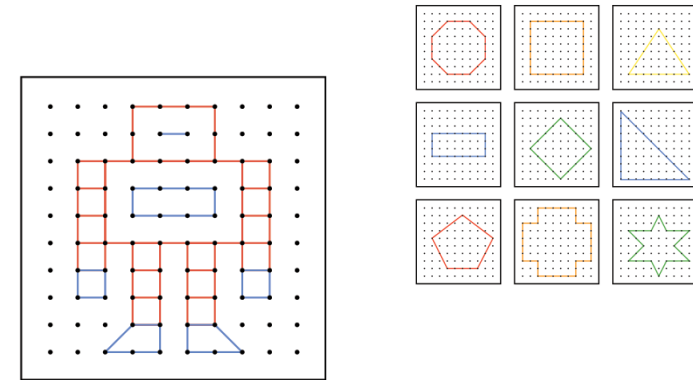
### Used to learn

- plane shapes
- translation
- rotation
- reflection
- similarity
- co-ordination
- perimeter
- counting
- right angles
- pattern
- classification
- scaling
- position
- congruence
- area



Invented by Egyptian mathematician Caleb Gattegno (1911-1988)

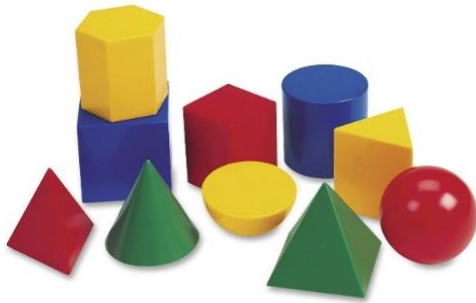
A board with nails around which elastic bands can be looped in order to explore concepts in geometry.



Geoboards provide students with the experience of creating shapes, rotating shapes, exploring angles, and concretely exploring the properties of geometric objects.



# What Is a Geometric Solid?

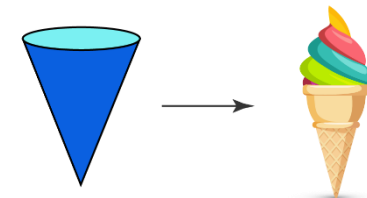
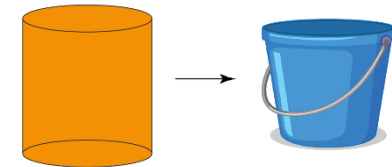
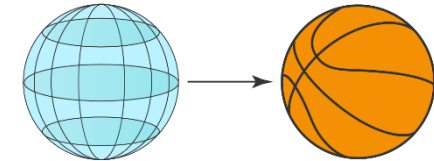
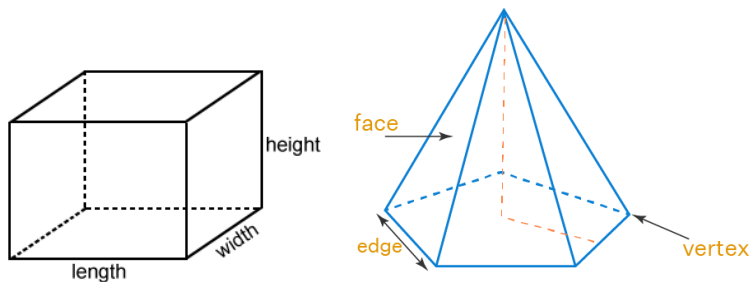


A geometric figure or shape that has a three-dimensional structure is known as a geometric solid. They occupy space. In simple words, they have volume

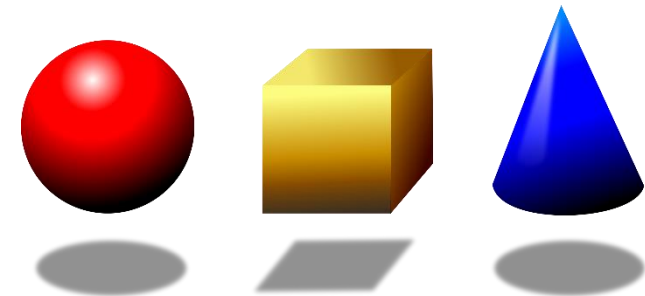
Students will become familiar with these figure and can recognize them in various places during day to day life

The branch of geometry that deals with three-dimensional (3D) solid shapes is known as solid geometry.

The geometric solid cube has three dimensions—length, width, and height.

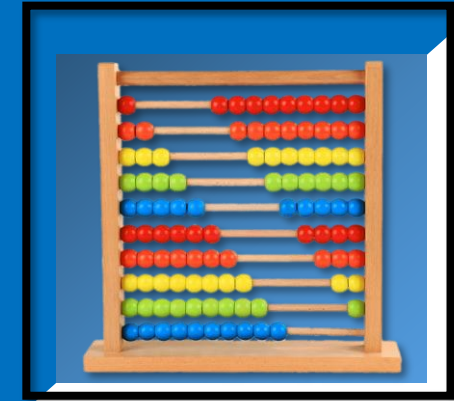


- Two Dimensional Shapes  
Triangle, Circle, Semi-circle, Square, Rhombus etc.
- Three dimensional shapes  
Cone, Sphere, Cylinder, Cube, Cuboid etc.



**Abacus** counting device that consists of a frame holding rods on which a specific number of beads are free to move.

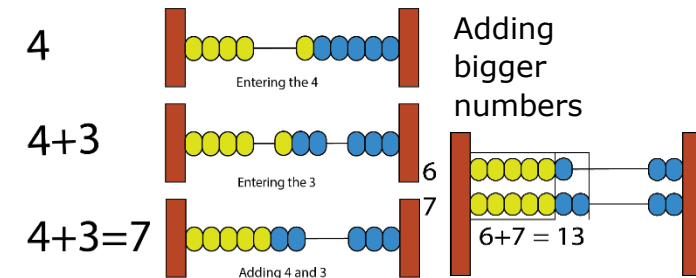
Each rod designates a given denomination, such as units, tens, hundreds, etc, in the decimal system, and each bead represents a digit or a specific number of digits



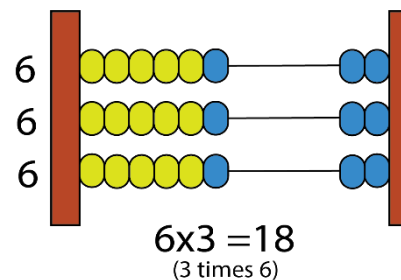
- The abacus is also great because it can be used to teach simple math like counting, addition, and subtraction
- As well as more complex operations like multiplication and division.
- It can even be used to work with fractions and to find square and cube roots



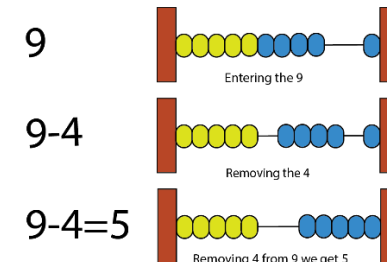
How to add numbers in abacus?



How to multiply numbers in abacus?



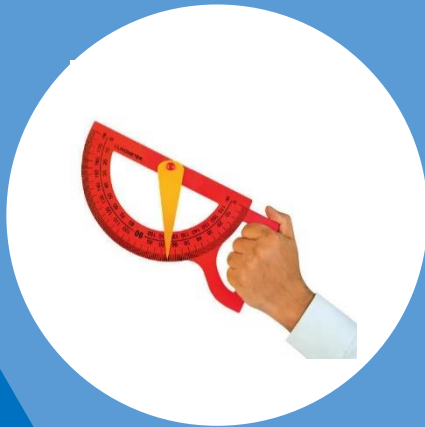
How to subtract numbers in abacus?



*Do you know?*

Abacus is the world first calculator. In Chinese abacus is called a "Suanpan" meaning calculating pan.



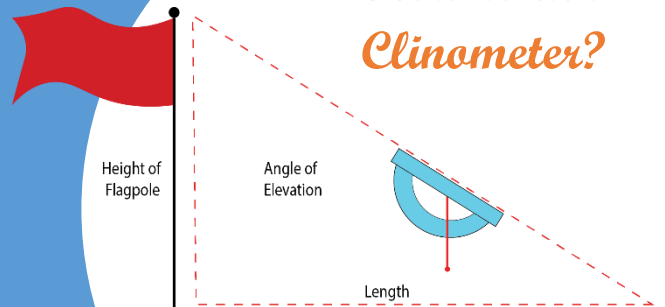


**Clinometer** is an apparatus for measuring a vertical angle, a slope, or the height of a large object (e.g. a flagpole)

# WHAT is? CLINOMETER

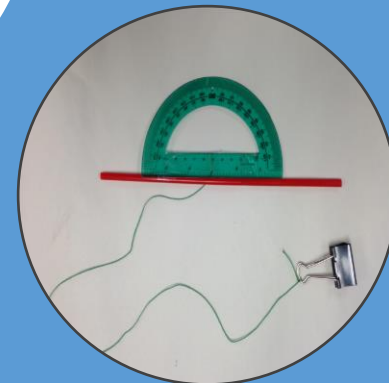
also known as a tilt indicator, tilt sensor, tilt meter, slope alert, slope gauge, gradient meter, gradiometer, level gauge, level meter, declinometer, and pitch & roll indicator

## How to use Clinometer?



Clinometers measure both inclines and declines using three different units of measure: degrees, percentage points, and topes.

## Make your own clinometer



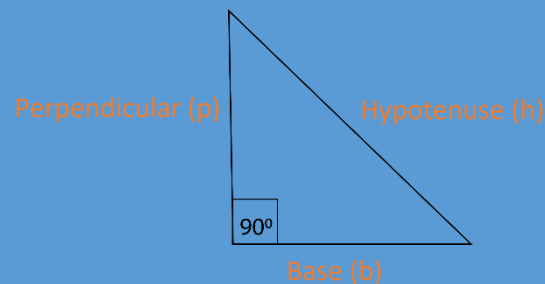
# 900

# Pythagoras Theorem

states that "In a right-angled triangle, the square of the hypotenuse side is equal to the sum of squares of the other two sides"

$$h^2 = p^2 + b^2$$

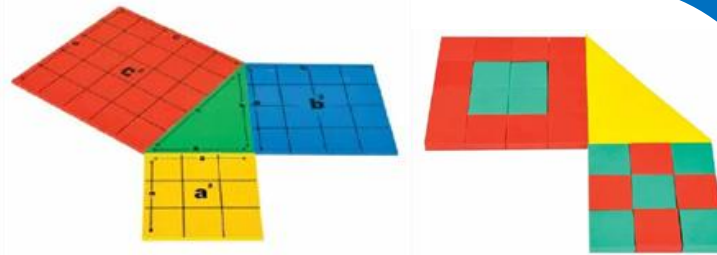
The sides of this triangle have been named Perpendicular, Base and Hypotenuse.



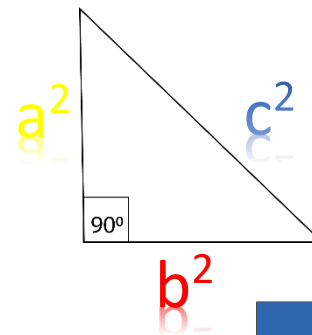
Here, the hypotenuse is the longest side, as it is opposite to the angle  $90^\circ$ . The sides of a right triangle (say  $a$ ,  $b$  and  $c$ ) which have positive integer values, when squared, are put into an equation

$$a^2 + b^2 = c^2$$

## Junior Pythagoras theorem



- Activities to do



$$a^2 + b^2 = c^2$$

$$\begin{array}{rcl} a^2 & + & b^2 = c^2 \\ 3^2 & + & 4^2 = 5^2 \\ 9 & + & 16 = 25 \\ & & 25 = 25 \end{array}$$

Set includes 3 big squares of three different colors for base, perpendicular, hypotenuse, right angle triangles, 9, 16 and 25 pieces of small square tiles of 3 different colors for making bigger squares for hand on activity.

## Senior Pythagoras Theorem



## Types of numbers

- Natural Numbers
- Prime Number
- Composite Number
- Whole Numbers
- Integers
- Rational Numbers
- Irrational
- Real Numbers
- Complex Number



## Set of marbles

this product is used to understand the concept of color recognition, counting, addition, subtraction, odd-even numbers, probability etc. Duly packed in plastic boxes.

Set of 400 Pcs. in 4 Colors

## Skip counting board

consists

of fifty slots provided with 25 marbles to understand

- Counting
- Skip Counting
- Multiplication
- Number Patterns.

The important feature of this board is it gives number sense to kids at early age.

Excellent manipulative for hands on activity.

Set of 25 marbles





## ROMAN NUMERALS CHART 1 TO 100

1	I	21	XXI	41	XLI	61	LXI	81	LXXXI
2	II	22	XXII	42	XLII	62	LXII	82	LXXXII
3	III	23	XXIII	43	XLIII	63	LXIII	83	LXXXIII
4	IV	24	XXIV	44	XLIV	64	LXIV	84	LXXXIV
5	V	25	XXV	45	XLV	65	LXV	85	LXXXV
6	VI	26	XXVI	46	XLVI	66	LXVI	86	LXXXVI
7	VII	27	XXVII	47	XLVII	67	LXVII	87	LXXXVII
8	VIII	28	XXVIII	48	XLVIII	68	LXVIII	88	LXXXVIII
9	IX	29	XXIX	49	XLIX	69	LXIX	89	LXXXIX
10	X	30	XXX	50	L	70	LXX	90	XC
11	XI	31	XXXI	51	LI	71	LXXI	91	XCI
12	XII	32	XXXII	52	LII	72	LXXII	92	XCII
13	XIII	33	XXXIII	53	LIII	73	LXXIII	93	XCIII
14	XIV	34	XXXIV	54	LIV	74	LXXIV	94	XCIV
15	XV	35	XXXV	55	LV	75	LXXV	95	XCV
16	XVI	36	XXXVI	56	LVI	76	LXXVI	96	XCVI
17	XVII	37	XXXVII	57	LVII	77	LXXVII	97	XCVII
18	XVIII	38	XXXVIII	58	LVIII	78	LXXVIII	98	XCVIII
19	XIX	39	XXXIX	59	LIX	79	LXXIX	99	XCIX
20	XX	40	XL	60	LX	80	LXXX	100	C



## Roman Numbers Kit

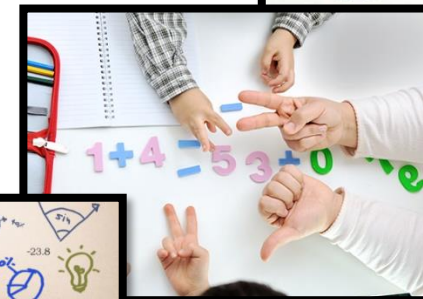
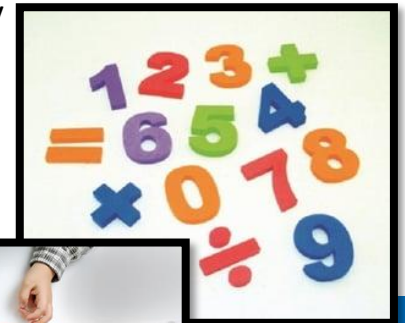
consists of square tiles with Roman number printed on them. Manipulate these tiles to represent any number in Roman.

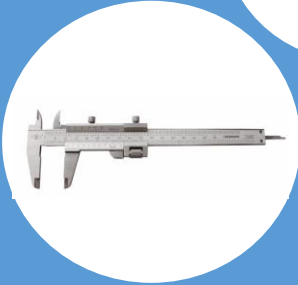
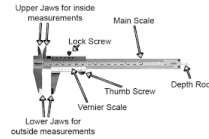
This set is provided with printed Roman numerical on small tiles for children and big magnetic tiles for teacher demonstration

## Plate with numbers

these durable soft EVA numbers are bright in color with soft magnetic back and are big for easy holding by little hands.

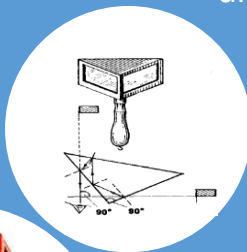
This is one of the best resource for number identification. Children can finger trace on the number to learn its formation.



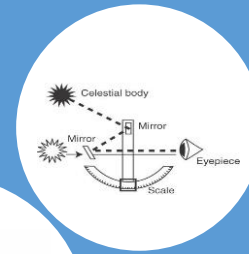


**Vernier caliper** is also used to measure the diameter of round and cylindrical objects, by positioning the jaws of the caliper on either side of the circumference.

- It is used to measure the internal diameter of a tube or cylinder.
- It is useful in measuring the length of the object.
- It is used to measure the diameter of circular objects.



**Optical Square** is a small hand instrument used by surveyors for laying off a right angle by means of two mirrors to set at angles that are multiples of  $90^\circ$  or of  $45^\circ$



**Sextant** is used to determine the angle of any object in comparison to the horizon.

A sextant consists of a small hollow pipe, mounted on a chassis with a few reflective mirrors and a  $60^\circ$  arc.

The angle of the arm and mirror is adjusted to align the object with the horizon and then the arc of the sextant is recorded to determine the angle of the object.







