



Explore - Experience - Enjoy

kitscon
math lab

and more...

What I hear, I forget.
What I See, I remember.
What I do, I understand
What I understand, I **enjoy**.

www.kitscon.com





Creating. McKis kit
 is most beautiful
 piece work.
 McKis Learning made
 possible an easy
 My gratitude to
 Team
 A.P.J. A.K. -
 K/1/08



What they
 say about
 KITSCON
 Math Lab...

Dr. A.P.J. Abdul Kalam - P resident of India (12.01.2005)

Algebraic Expression kit is an excellent one
 which will make the students to create
 interest towards Algebra. Generally all the
 kits are very useful to learn the concepts easily
 Shilpi

Alpha Wisdom Vidhyashram - Trichy

Few misconceptions were clarified, which we had been
 teaching from many years. It was very enlightening
 Nade

AMS P Obul Reddy - Hyderabad

You are doing a wonderful
 job by creating and exploring possible ways to
 learn this feared subject with interest & profit
 qk

B.K. Birla Centre for Education - Mumbai

The workshop stimulates the confidence of facilitators and
 also make me to realize the other way of generalizing the formulas.
 M. Shafi

Chettinadu Vidhya Mandir - Karur

Very useful and informative workshop for the
 teachers to teach in future and also very helped to plan the
 activities
 Anayathur

Kamala Nikethan Montessori School - Trichy

It was simply a seminar with full of new
 techniques to teach.
 P. R. S.
 3/5/16

Delhi Public School - Jabalpur

This is first time I am attending math lab workshop. I felt
 to happy. I will learn many things further also. Your games are excellent.
 we used games like this. Thank you madam.
 Jit

Kavi Bharathi - Chennai

Mr. A.P.J.A-Kalam has rightly complemented
 wishes and all the very best
 An

Kings CBSE School - Tirunelveli

very informative and through using their
 manipulative like feeling of the MATH concepts and
 students can feel and understand can be
 better analyzed the concepts of MATH in a
 simpler way
 Shalini

KMR International School

KITS & CONCEPTS is a pioneer in manufacturing Math Learning Instruments & teaching aids. Kitscon has partnered with Ramanujan Museum & Math Education Centre to design & develop math learning instruments & provide training for teachers. Being a social enterprise, Kitscon is working hard to improve math learning in schools. Kitscon Math Lab Instruments are accompanied by grade wise work books, which serves not only as a manual, but also as a record for students.

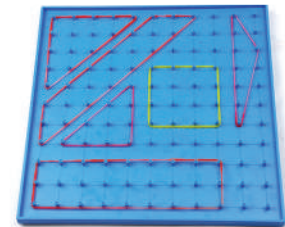
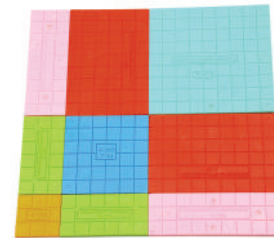
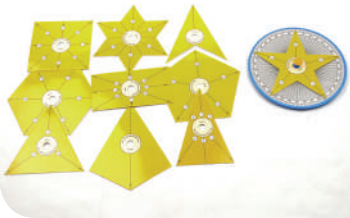
Years of expertise, coupled with non compromising standard in quality has made way for Kitscon materials in more than 2500 schools across the country and abroad.

Why Math Lab?

Mathematics is in the mind and is man-made and hence need-based. Once concepts are caught and not taught, students can be seen blossoming into self-learners, For more information, visit our website www.kitscon.com.

OUR VISION

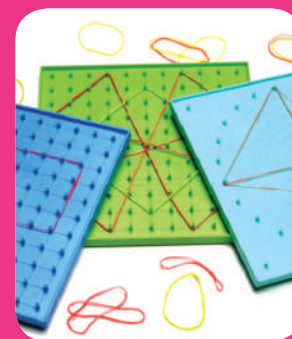
To
remove
Math Phobia
and Foster
Creativity.





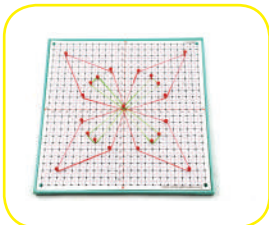
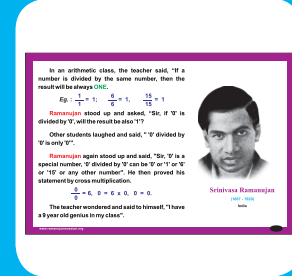
KITSCON Math Lab Instruments are:

- Made of virgin polystyrene plastics.
- Made to precision.
- Strong enough to withstand normal use and handling by students.
- Colorful so as to appeal to the student's natural curiosity and desire for action.
- Numbered for easy identification and replacement.
- Designed to accommodate student's physical competencies.



KITSCON Math Lab Display and Demo Boards are:

- Inkjet printed in four colour on high dense foam boards.
- Precise in size and laminated for easy cleaning.
- Fitted with Frame.
- Fixing the display boards permanently on the walls of the KITSCON Math Lab will reinforce the concepts taught and induce a mathematical atmosphere.



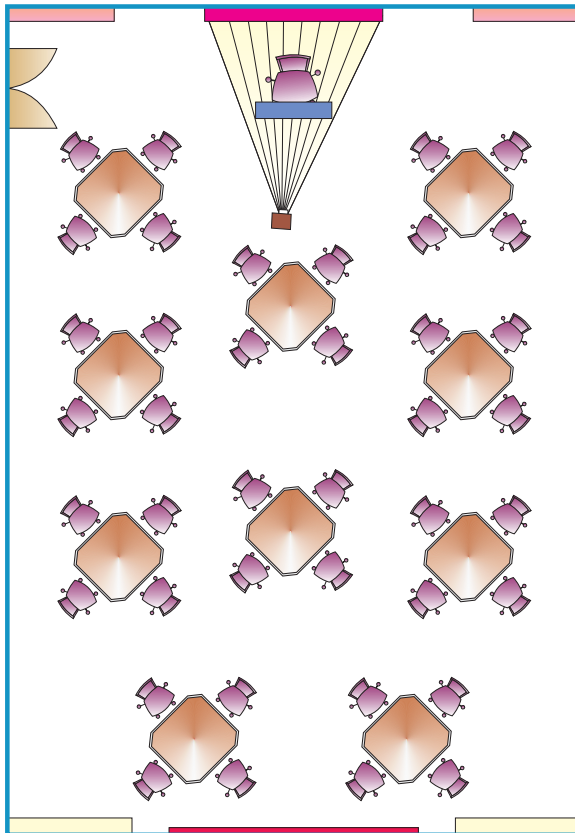
KITSCON Math Lab Learning Workbooks are:

- Graded according to the need of Classes I to X. Fulfills the need of CBSE, ICSE, and all other state syllabus.
- KITSCON Math Lab Workbook provides step-by-step methods to understand and conduct activities.
- Has observation tables for students and lets them to jot down their findings.
- Space for illustrations and drawings based on visualization.
- The language is mathematical, so teacher's guidance is essential.



Kits & Concepts will provide all help and guidance to supply:

An Ideal Math Lab Layout



- A blue print of the school math lab.
- Ideal furniture and storage systems.
- Pin up boards, Green/White boards.
- Updated KITSCON Math Lab Instruments.
- Required KITSCON Math Lab Workbooks & consumables.
- Arrange workshop & training for teachers in collaboration with Ramanujan Museum & Math Education Centre - Chennai.
- Provide other teaching aids, math expo material, and other add-on materials.



Also available :

Kitscon KG Material

Kitscon Math Add-on Materials

Kitscon Math Expo Materials

Kitscon TLM's

Kitscon Math Puzzles and more...



Class Wise Activities

CLASS I

1. Ten & one more upto 20
2. Addition - Putting together
3. Addition facts of zero
4. Subtraction - Taking away
5. Subtraction by Comparison
6. Turn around facts
7. Grouping in Tens
8. Addition - Increasing situation
9. Subtraction - Decreasing situation
10. Representing a number in two different ways
11. Addition - Together situation
12. Subtraction - Removal
13. Subtraction by Comparison
14. Longer & Shorter
15. Measurements & Patterns

CLASS II

1. Addition - Number Line
2. Subtraction - Number Line
3. Subtraction - Complementary Addition
4. Straight & Curved Lines
5. Representing a 2 Digit number
6. Addition - 2 Digits (Changing)
7. Subtraction by removal
8. Subtraction - Comparison
9. Subtraction and addition facts
10. Row and Column
11. Skip counting in 2s, 3s, and 5s
12. Meaning of Multiplication
13. Building Multiplication Tables
14. Multiplication - Commutative and zero facts
15. Money - Introduction

CLASS III

1. Addition - 3 Digits (Changing)
2. Subtraction - 3 Digits (Comparison)
3. Face Value, Place Value & Expanded Notation
4. Addition - 4 digits (changing)
5. Subtraction - 4 Digits (Changing)
6. Multiples of 10 & 100
7. Multiplication - 2 x 2 Digits
8. Meaning of Division- Repeated Subtraction
9. Division by equal distribution
10. Division by equal grouping
11. Fraction - Continuous situation
12. Fraction - Discrete situation

CLASS IV

- | | | |
|-----------------------------------|---|---|
| 1. Addition and Subtraction | 5. Equivalent fractions | 9. Decimal Fraction - Introduction |
| 2. Division by equal distribution | 6. Proper, Improper & Mixed Fraction | 10. Decimal Fraction - Addition & Subtraction |
| 3. Division by equal grouping | 7. Fractions - Additions & Subtractions | 11. Money transaction |
| 4. Unit-Like-Unlike fractions | 8. Improper & Mixed fractions (Add & Sub) | 12. Railway time |

CLASS V

- | | | |
|----------------------------|---|-----------------------------------|
| 1. Prime Factorization | 5. Decimal - Addition & Subtraction | 9. Linear Pair of angles |
| 2. Least Common Multiple | 6. Decimals - Multiply & Divide by 10 & 100 | 10. Metric Conversion - Length |
| 3. Greatest Common Divisor | 7. Types of angles | 11. Perimeter & Area of Rectangle |
| 4. Decimal Properties | 8. Complementary & Supplementary angles | 12. Volume of Cube & Cuboid |

CLASS VI

- | | | |
|--------------------------------------|-------------------------------------|--|
| 1. Integer - Number line Addition | 5. Triangle Classification - Sides | 9. Parallel Lines and its transversals |
| 2. Integer - Number line Subtraction | 6. Triangle Classification - Angles | 10. Views of Cube & Cuboid |
| 3. Integer - Addition | 7. Triangle Properties - 1 | 11. Algebra - Introduction |
| 4. Integer - Subtraction (Removal) | 8. Triangle Properties - 2 | 12. Linear Equation |

CLASS VII

- | | | |
|---------------------------------------|----------------------------|-------------------------------|
| 1. Product of Polynomials | 5. Rotational Symmetry | 9. Area of Pathway |
| 2. Algebraic Expression - Addition | 6. Quadrilaterals | 10. Value of |
| 3. Algebraic Expression - Subtraction | 7. Area of a triangle | 11. Area of Circle |
| 4. Reflection Symmetry | 8. Area of a Parallelogram | 12. Visualizing Solid figures |

CLASS VIII

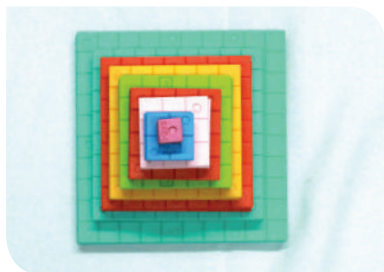
- | | | |
|--|---|---|
| 1. Square & Square roots | 5. Identity $(a + b)^2$ & $(a + b + c)^2$ | 9. Angles of a Polygon |
| 2. Cube & Cube roots | 6. Identity $(a - b)^2$ & $(a^2 - b^2)$ | 10. Area of Rhombus & Trapezium |
| 3. Algebraic Expression - Multiplication | 7. Cyclic Quadrilateral | 11. Volume of Cylinder & Cone |
| 4. Algebraic Expression - Division | 8. Pythagoras theorem | 12. Surface area of Cube, Cuboid & Cylinder |

CLASS IX

- | | | |
|---------------------------------------|---------------------------------------|---|
| 1. Real Number line | 7. Segment Classification | 13. Polygon Areas - Regular |
| 2. Factorization | 8. Chord Bisector | 14. Volume & Surface area - Cone |
| 3. Identity $(a + b)^3$ & $(a - b)^3$ | 9. Angle in two segments & Semicircle | 15. Volume & Surface area - Pyramid |
| 4. Properties of parallelograms | 10. Subtended angle of an arc | 16. Volume & Surface area - Hollow Cylinder |
| 5. Mid point theorem | 11. Equal & Unequal chord - Angles | 17. Read and plot points |
| 6. Circle Parts | 12. Equal & Unequal chord - Distance | 18. Graph of a Linear Equation |

CLASS X

- | | | |
|----------------------------------|--|---------------------------------|
| 1. Similarity | 6. Sum of first 'n' natural numbers | 10. To understand Slope |
| 2. Basic Proportionality theorem | 7. Sum of odd and even consecutive natural numbers | 11. Distance formula derivation |
| 3. Intersecting Chords | 8. Sum of first 'n' square numbers | 12. Finding the area |
| 4. Tangent Properties | 9. System of Linear Equations | 13. Area of a segment |
| 5. Euler's Formula | | 14. Height & Distance |



Math Lab Solutions for Schools

Kitscon offers 3 different Math Lab solutions to suit every school's different needs.



CONTRACT
PERIOD
3 YEARS

Under this program Kitscon shall provide:

- All required Math Lab instruments as per student's strength.
- Every student in the program will be given Math Lab workbooks for 3 Academic years.
- Twenty Math Lab Display boards.
- Necessary TLM's.
- Three days of Teacher Training (2 days of initial training and 1 day after 6 months).
- Skype call support for total 1 hour every month.
- 2 Activities / games and their required materials.
- Yearly assessment of student learning for 3 years.
- Reports at the end of every year.
- Technical help in conducting Math Mela / Math Expo once during the contract period.
- Conduct of Math Talent Exam for all classes and certificate for participants and winners.

* Minimum guarantee of
450 children for Poorna program.



CONTRACT
PERIOD
2 YEARS

Under this program Kitscon shall provide:

- All required Math Lab instruments as per student's strength.
- Kitscon will provide all math learning instruments for all classes according to the requirement.
- Work books shall be provided for all students for two years.
- School will be given ten Display boards as lab exhibits.
- Initial training for teachers shall be provided for two days each for two years (Total four days).
- Online Skype supports will be provided once in a month for an hour each.

*Minimum guaranty of 600 children for Suvudha program.



CONTRACT
PERIOD
1 YEAR

Under this program Kitscon shall provide:

- All required Math Lab instruments as per student's strength.
- Kitscon will provide Math learning instruments
- Initial training of two days shall be provided for teachers.
- Online Skype support will be provided after 6 months for an hour.

*Minimum purchase of 6 sets of Math learning instruments.

SNAPSHOT OF THE THREE PROGRAMS

MATERIAL	MATH INSTRUMENTS	WORK BOOK FOR STUDENTS	FURNITURE	DISPLAY BOARDS
Poorna	As per requirement	for 3 years	Yes	20
Suvidha	As per requirement	for 2 years	-	10
Swathanthra	As per requirement	Once	-	-

TRAINING	YEAR - I		YEAR - II		YEAR - III	
	INITIAL	AFTER 6 MONTHS	INITIAL	AFTER 6 MONTHS	INITIAL	AFTER 6 MONTHS
Poorna	2 days	1 day	1 day	1 day	1 day	1 day
Suvidha	2 days	-	2 days	-	-	-
Swathanthra	2 days	-	-	-	-	-

OTHER SERVICE	SKYPE	ASSESSMENT ON STUDENT LEARNING	MATH EXPO HELP	MATH TALENT EXAM	ACTIVITIES AND GAME SHEETS
Poorna	Every month 1 hour	Once in every year	Yes	Once in the period of 3 years	2 Activities/games per class
Suvidha	Every month 30 minutes	Once in every year	Yes	Optional	-
Swathanthra	After 6 months 1 hour	-	-	-	-

KITSCON CREATIVE LAB

CUBORO FROM SWITZERLAND

Marble Track System Cuboro is a high quality wooden product. It has 12 differently worked wooden cubes, which are chosen out of 54 prototypes. It is a marble track system, where the task is considered to be completed if the marble find its way to the end without any interruption.

Logical Thinking:

Cuboro encourages children to think logically and helps them to develop their spatial thinking.

Stimulating the Creativity:

Besides logical thinking cuboro stimulates children to think in a different way and to create a marble track, from their own imagination.



Experimentation & problem solving:

Specific problem statements for the construction of cuboro marble track systems pose valuable mental exercises on different levels of difficulty. These exercises test the individual on three-dimensional and logical thinking, while fostering independent play. The statements also have the quality of riddles, the solving of which is satisfying and fosters independent thinking.

CUBORO CREATIVE THINKING BOOK

In addition to Cuboro, we also have Cuboro Creative thinking Book which consists of 105 structured task cards with a teacher's manual. These 105 task cards have been divided into three different groups for class 3, 4 & 5 for students to solve.

This manual makes it easy for the students to understand the logical processes as well as the mathematical and physical patterns involved.



KAPLA FROM NETHERLANDS

KAPLA is an educational construction set. The wooden planks are made out of 100 % untreated pine wood. The game possesses a high educational value. By using their creativity, children will discover their artistic talent.

Logical Thinking

First of all **KAPLA** encourages children to think logically and helps them to develop their spatial awareness.

Stimulating Creativity

Besides logical thinking **KAPLA** stimulates children to think in a different way and to create constructions from their own imagination. By using their creativity children will discover their artistic talent.

Concentration, Perseverance and Patience

KAPLA encourages perseverance, patience and concentration, which are key elements to success at school.



Cognitive Development

During childhood a child goes through several phases of cognitive development. In each stage a child likes to play in a different manner and will develop different skills

Teamwork

KAPLA is an ideal game to play in a group. It stimulates teamwork and cooperation.

Math Concepts:

Kapla teaches about the core math concepts and about the basic geometrical shapes. Physical balance & symmetrical property are also learnt. Concluding its educational value it has been introduced as a teaching tool in the “French National Education System”.

Transparent Geo Board



KC 4001

- 5x5 Transparent Geo Board
- Shapes

Abacus 4 Spikes



KC 4002

- Reading 2 Digit Numbers
- Comparison

Math Kit
Nursery & KG

Attribute Block



KC 4003

- Sorting according to colour, shapes & thickness

Beads



KC 4004

- Beads - Round, Cylindrical Saturn Big, Medium & Small
- Counting
- Patterns

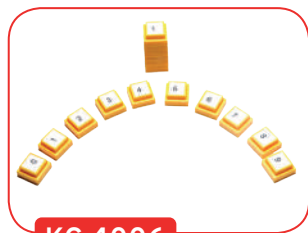
Block Circle



4005

- Identifying colours.
- Making colour patterns
- Tall, Short

Block Square



KC 4006

- Identifying Numerals & Forming Numbers

Clock with Time Cards



KC 4007

- Time

Counters



KC 4008

- Counting

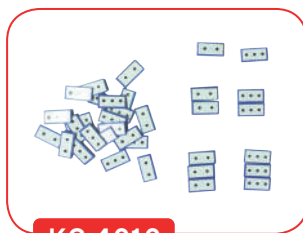
Dice



KC 4009

- Numeration Games

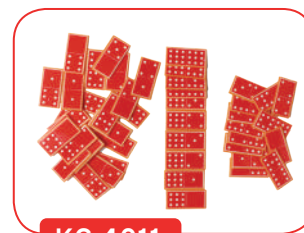
Dot Rectangles



KC 4010

- Repeated Additions
- Number Patterns

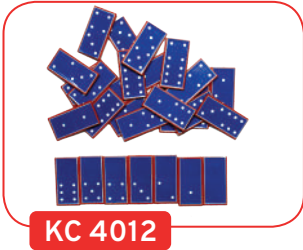
Double Nine Dominoes



KC 4011

- Number Matching
- Number Games

Double Six Dominoes



- Number Matching
- Number Games

KC 4012

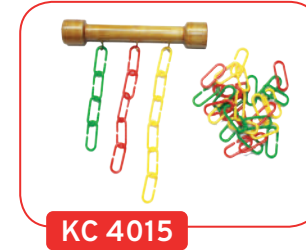
Linking Cubes



- Tall, Short
- Construction
- Addition, Subtraction

KC 4014

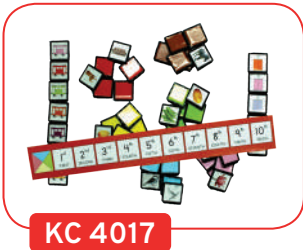
Links



- Long, Short
- Measurement
- Colour Patterns

KC 4015

Number Peg Scale



- Number Recognition
- Positional Numbers

KC 4017

Number Plates



- Counting
- Numeral - Number Matching

KC 4018

Pattern Blocks



- Copying & Forming Patterns

KC 4019

Peg Board with Data Pegs



- More, Less, Before, After

KC 4020

Sorting Kit



- Sorting by Colour
- Sorting by Size
- Sorting by Weight

KC 4021

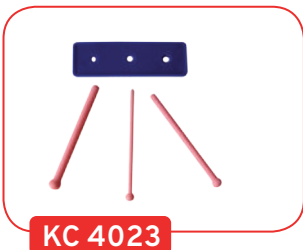
Tens Frame



- Making Tens
- 2 Digit Numbers
- Before & After Numbers

KC 4022

Thick & Thin



- Sort by Thickness

KC 4023

Token (Circle, Square & Hexagon)



- Counting & Patterns
- Sorting by Attributes
- Addition, Subtraction

KC 4024

Flash Cards (Numbers & Names)

KC 4013

Number Chart

KC 4016



The Session was useful and interesting and
 it help teachers how to make children to learn Maths
 more interestingly and enjoyable and also makes them to think
 on their own
 T.S.S. AKTHINAI

KMR International School

Quite informative. If ^{teaching} aids are (kits)
 are there then it is more comfortable
 to make the students clear their difficulties.
 N.Chandran

Nachiketa Senior Secondary School - Jabalpur

This is the first time I'm attending a workshop
 like this. I enjoyed the complete session. An Activity
 based learning is excellent.
 Yes, I'm interested to be a Volunteer!"
 J. J. J.

Rock Well International School - Hyderabad

Please keep the good work ONN. I
 believe that Now MATHEMATICS = MATHE-MAGIC

Royal Senior Secondary School - Jabalpur

Mam is fabulously committed to removing
 math phobia from teachers and students. An excellent
 effort to enhance future generation's math skills.
 Kana

S.N.Kansagra School - Rajkot

It was a great experience for me. This workshop
 is very useful one. Every teachers should attend this workshop and
 every school should buy this material and use.
 S. S. S.

Samritan Residential School - Tirupattur

I liked the usage of the
 Hands on materials the most.
 Workshop was good and feel
 benefited in them students will also be
 Benefited. Trainers explanation is good.
 A. S. S.

Sri Ramdayal Khemka Vivekananda Vidyalaya -Thiruvottiyur

First of all, I thank my institute
 to providing such a realistic and interesting learning
 opportunity and I'm sure I do apply this in future.
 Thankyou! Once again.
 B. R. R.

Sri Vijay Vidhyalaya Matriculation School - Krishnagiri

Whichever manipulative were used were excellent and
 helpful for us to make students understand the concepts clearly.
 Enjoyed thoroughly.
 S. S. S.

St. Pauls School - Rajkot

Had a wonderful experience - Hands on
 aids on!!!
 Kamal

The Galaxy School - Rajkot

This workshop is very useful to me. I learnt
 how to teach maths in easy way to students.
 R. S. S.

Vidhya Mandir Senior Secondary School - Salem

The session was very interesting and
 am sure that if followed properly would definitely
 bring a lot of thinking skills and creativity in the child.
 Would definitely try to follow these valuable methods. Thanks!
 S. S. S.

Vivekananda Academy - Kangeyam Town



Concepts are
CAUGHT NOT
TAUGHT!



KITS & CONCEPTS

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