



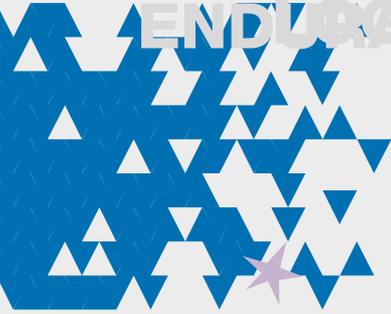
Abacus-based Math and  
Skill Development Program for



ANALYSIS

# PREGNANT MOTHERS

ENDURANCE

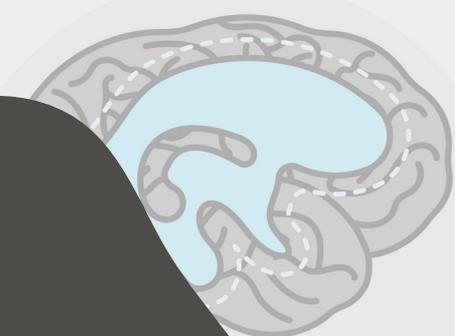


**Basic concepts of using  
the Indian Abacus**

**NEW**



COMPREHENSION



VISION

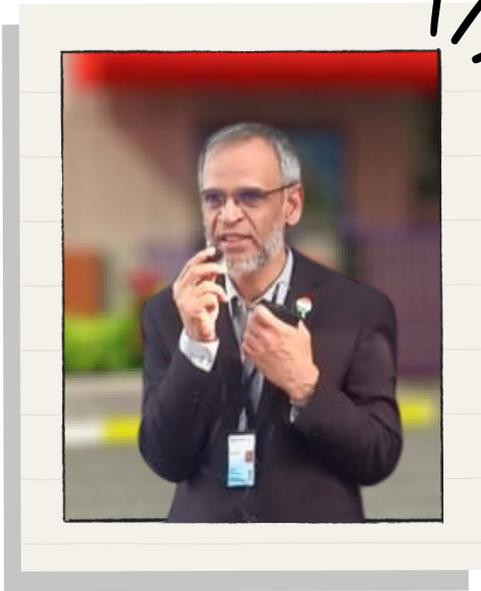
A book about how  
you develop your  
child's brain skills  
and become wiser  
in life.

HEARING

APPLICATION

[www.indianabacuspg.com](http://www.indianabacuspg.com)

*Congrats  
on your new  
baby!*



☎️ 📞 7200 227 227 / 9444952532

✉️ admin@indianabacus.com

📍 Anna Nagar West,  
Chennai-600040

🌐 www.indianabacus.com

## Mothers,

### Greetings from Indian Abacus !

Indian Abacus-based Math and Skill development program for unborn babies through their mothers. The parents also play a key role in the 'skill transfer' and guide the New baby and children in using the abacus instrument in the prescribed manner. This program is a boon to mankind since this program helps all in enhancing learning ability, Listening Skills, Concentration, Photographic Memory, Maths, increasing Speed, and attaining Accuracy and proficiency in all subjects. obviously, as a parent, your contribution helps the unborn baby in discovering the genius within them.

Indian Abacus is a programme/workshop developed specifically for unborn babies through pregnant Mothers. As a pregnant mother's physical, mental, and emotional condition improves the development of her child, the Indian Abacus developed an apparatus and Skill development program for pregnant mothers. Using this knowledge, the Indian Abacus organisation wants to help pregnant mothers enhance their awareness and maintain a healthy baby mind and emotional state. Additionally, the programme instructs them on how to deliver a brainer child and establish a prosperous future for their unborn child.

Best Wishes

**Basheer**

Inventor-IndianAbacus Instrument  
CEO., Indian Abacus Pvt. Ltd.,

## The Scope and Advantages are:

1. Abacus-based method of teaching the number makes the learning interesting and develops image memory.
2. Visualisation (Photographic Memory) is the first and major skill to be developed by the child.
3. Colour images go deep into the memory of the Children.
4. These colour images are easily recalled from memory. Hence colour images are converted back as Numbers.
5. Memorisation becomes easier and Kids easily remember the numbers.
6. Each image represents a number.
7. Kids learn the numbers with fun.
8. Learning becomes easier and stress-free.
9. When kids move to 1ST Standard, numbers are not nightmares to them and children are able to do arithmetic easier and faster.
10. Additions and subtractions become fun for them.
11. It becomes easy for the play school children TO TEACH in the regular stream.
12. Children become stronger in arithmetic calculations in the regular stream because of a strong foundation laid in numbers/maths.
13. The proficiency in numbers, makes them good at other areas of learning too.
14. Class: weekly 2 hrs.
15. Course materials for mothers: Indian Abacus instrument, Starters book A and B, Instructional manual and certificate for course completed.

## Course Outline:

1. Duration 6 weeks - workshops
2. Understanding the structure of the abacus
3. Place value of number system
4. Manipulation of Slider Abacus
5. Learning number structure through Indian Abacus
6. Introduction of basic addition
7. Introduction of basic Subtraction

## Course Outcome:

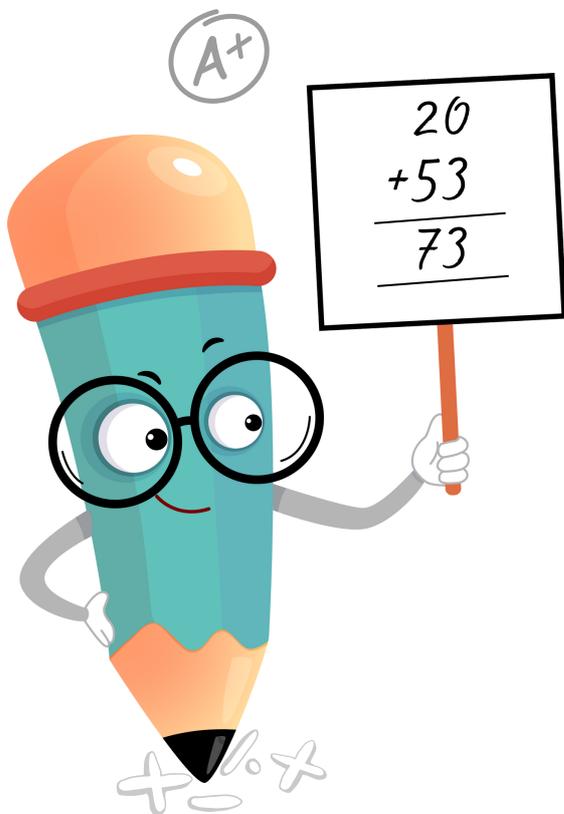
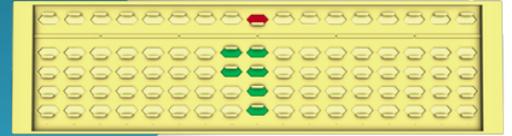
1. Understand the place value concept
2. Easily understand the addition and subtraction concepts
3. Strong foundation for number-based mathematics
4. Learn numbers at a faster pace
5. Improves their Visualization, Concentration, photographic Memory and Listening Skills

We shall provide 12 hrs. (6 weeks, each session 2 hrs) ABACUS BASED MATH FOUNDATION COURSE AT OUR OFFICE OR YOUR PLACE or through Online.

# BASIC CONCEPTS

of using the Indian Abacus

## STARTER'S



-  Skill Development
- ...
-  Maths
- ...
-  Listening Skills
- ...
-  Concentration
- ...
-  Photographic Memory
- ...
-  Academic Excellence

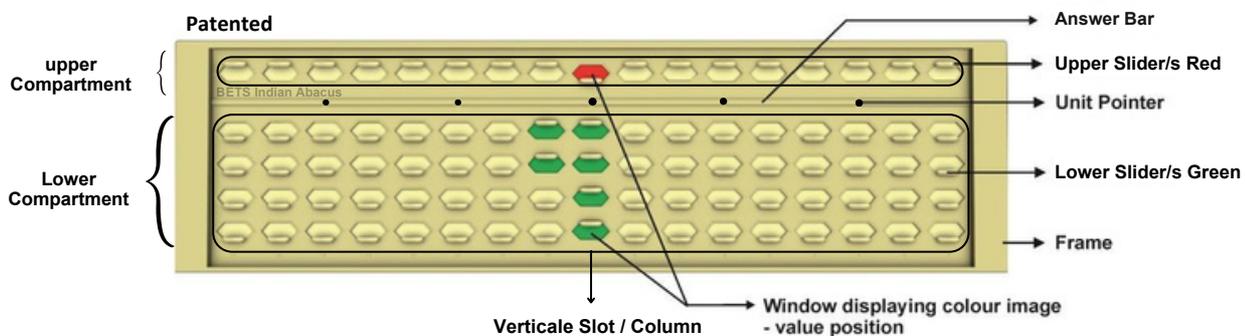
**Program Designed for:**  
**Pregnant Mothers (Begin Jr)**  
**Workshops**

## 1. Indian Abacus ?

The Indian Abacus is an educational counting tool for learning to do fast and accurate mental arithmetic skills for children of the age group – 3 to 13 years, Easier, faster and stress - free with a special focus on helping the children learn numbers and identify them as colour images, to Add, Subtract, Multiply and Divide them in doing the calculations, more particularly it helps in enhancing their brain skills such as Concentration, Visualization, Listening Skill, Self Confidence, speed and Accuracy by activating the right brain. Helps students to overcome the fears of mathematics and Academic excellence in all subjects.

## 2. Description of Indian Abacus

### Student Abacus



**The answer bar divides into 2 parts - Upper (Red) and lower (Green) compartment.**

- The Sliders below the answer bar are called lower Sliders (Green - Standing Slider).
- The Sliders above the answer bar are called upper Sliders (Red - Sleeping slider).
- There are 4 lower Sliders (Green) and 1 upper Sliders (Red) in one column (Total 5).
- The value of one lower Slider (Green - Standing Slider) is 1.
- The value of one upper Slider (Red - Sleeping Slider) is 5.
- Only when Sliders touch the answer bar the abacus get value.

The answer bar divides into 2 parts - Upper (Red) and lower (Green) compartment.

- g. To add (+) the Sliders (Red / Green) move towards the answer bar
- h. To subtract (-) the Sliders Red / Green) move away from the answer bar.
- i. The dots are called the pointers. The middle pointer is the units pointer.
- j. As we move right the value of the Sliders keep decreasing 10 times its counterpart on the left.  
As we move left the value of Sliders keep increasing 10 times its counterpart on the right.
- k. In the abacus, the operation are always left to right, digit by digit (for +, -, x & :)

### 3. What is Zhusuan (Abacus) & Mental Arithmetic study ?

This program actually comprises 2 subjects namely,

- a. Abacus-based Math calculation.
- b. Abacus Mental Arithmetic and Brain skills development.

### 4. Abacus calculation is the method of computation using the Abacus.

Abacus calculation is a Skill that goes through the following phases to master the Abacus.

- |                     |                      |
|---------------------|----------------------|
| a. Cognitive Phase  | d. Proficiency Phase |
| b. Acceptance Phase | e. Autonomous Phase  |
| c. Practice Phase   | f. Expression Phase  |

### 5. Mind Math (Mental Arithmetic)

Initially the child moves the sliders in the physical abacus to do arithmetic sums. After 6 weeks, the child imagines the abacus in its mind and can do abacus-based math sums without the use of the physical abacus.

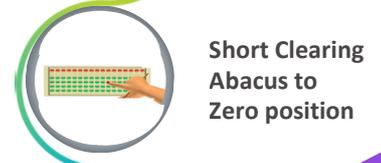
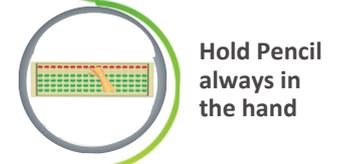
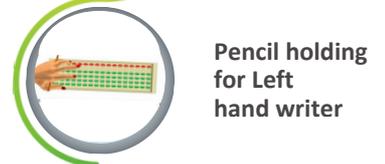
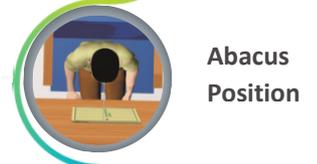
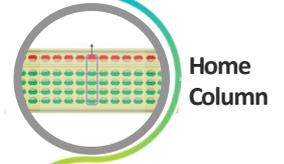
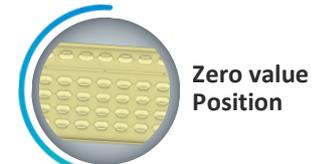
### 6. Curriculum/program - Spread over to 8 levels

- a. Use of the Indian Abacus tool
- b. Proper techniques of working with the Abacus.
- c. Speed, recognition and writing of numbers.
- d. Computation using Abacus.
- e. Basic computation skills in addition and subtraction.
- f. Combining Mental Arithmetic and abacus Skills
- g. Basic computation skills in Multiplication and division.
- h. Speed computation skill in Addition and subtraction.
- i. Speed computation skill in Multiplication and division.
- j. Sharpening of listening skills in Speed computation.
- k. Exercising both the Left and right brain.

## 7. Important Instructions to use Abacus

### Home column - to start doing the computation.

There are totally five unit pointers facing columns, but the student should use only the middle unit pointer (in the 7th column)



Long Clearing  
Abacus to Zero position

### a. Sitting Posture:

- I. Sit  $\frac{1}{2}$  the space of chair
- II. Do not rest on the back of the chair
- III. Do not press elbows on to table, maintain some distance

### b. Abacus Position:

Before commencing, the abacus must be placed vertically on the left hand side

### I. When working on the abacus

- a) Place abacus 4 fingers away from the edge of the table
- b) The unit point should be in alignment with your nose

### II. When working out the book exercise

- a) Place abacus below the row which you are doing
- b) The unit point should be placed below the sum which you are doing

### c. Holding the Pencil:

**Left Handers:** Hold the pencil in the left hand. It passes between the thumb and the index finger and out of the ring and the last finger. Allow 2.5 cm projection at the end of Pencil.

**Right Handers:** Hold the pencil with the last 3 fingers of the right hand, index finger and thumb pointing out. Allow 2.5 cm projection at end of the Pencil.

### d. Holding the Abacus :

Abacus must be held with thumb and last two fingers of the left hand.

### e. Clearance of Abacus:

When sliders are not in position on the abacus then use the clearance method; use right hand index and thumb finger to hold the bar on both sides and sweep the sliders from right to left side.

### f. Short Clearance:

Hold the bar using right hand index and thumb fingers together on either side of the bar and sweep the sliders from right to left, wherever it is required.

### g. Long Clearance:

Hold the bar using right hand index and thumb fingers together on either side of the bar and sweep the sliders from right to left in all the columns of the abacus.

## 8. Lesson Plan - Starters (1st Level)

Abacus- Addition & Subtraction	1 Digit - 3, 4 & 5 Rows Sums & 1&2 Digits 3, 4 & 5 Rows
Writing the values of Sliders	Sums. Single and Double digits Randomly.
Drawing sliders for the given value	Single and double digits Randomly.

### Activities Benefits

Speed Writing	<b>3 types (Direct View, Indirect View &amp; Left Handwriting)</b> 1234567890, 0987654321, 41233214, 14322341, 1928374655, 9182736455, 54535251.
	To improve speed of writing, neat & legible handwriting by writing normally, by writing without looking at what is being written & by using left hand.
Image Flash	<b>Showing slider images in a flash (1 digit - 10 rows)</b>
	To make children observe slider images as fast as possible to develop image memory.
Fingering Practice	<b>Practice of fingering movements on abacus.</b>
	Fingering exercises based on formulae to register formulae in children's mind & to make thorough with finger's usage and also to improve speed & accuracy.
Oral Sums Practice	<b>Two types (based on formulae and based on revision of formulae) 1D - 3&amp;5R - 1&amp;2Digits - 3,5,8&amp;10Rows.</b>
	To improve listening skills in children, to increase the speed of working out the sums & to get accuracy in sums at a jet speed.
Random Writing	<b>Listening &amp; writing skills (1 digit 10 rows).</b>
	To develop listening, analysing & writing skills in children.
Book Practice	To check the skills of accuracy & speed of children in when working out the sums.

## 9. Instructions To Course Regarding Home Practice

- Ensure the children finish both the books before taking up their exams.
- Practice makes Perfect' this is the golden rule for Indian Abacus programme.
- Grading Exams are conducted once every year.
- National Competitions are conducted once every year.
- Participation and Merit Certificate are given to all participants of National Competition and International competition.
- Level test are conducted after completion of the respective level at class level.
- Certificates are issued for completion of each level.
- Certificates are issued for the Grading Examination from Indian Abacus Global Head Office.

The Guideline has been introduced mainly to give the younger children more time to understand the concept and also learn the formulas with less stress and strain. The Abacus Tutor should other than making them work out the pages take time teach them the concepts of addition and subtraction.

## 10. What is the use of fingering /speed writing note book?

The activities like orals – the answers to oral questions, speed writing – writing numbers for Direct view, Indirect view and Left hand writing in the speed writing section of the book, random writing – listening to the called out numbers and writing the same are all done in the fingering/speed writing section of the book.

## 11. Oral Sums

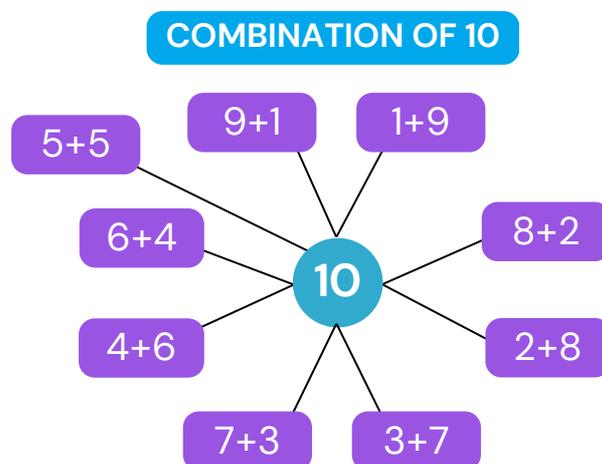
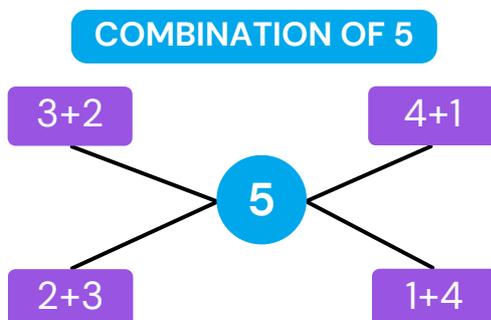
- I Orals are actually the numbers called out so that children practice sums on abacus or mentally to increase speed and accuracy in their calculations.
- II. Numbers Should be called out as per the syllabus depending upon the formula you taught.
- III. Instruct the children to compute the called out numbers on abacus by adding or subtracting and write the answers in the fingering / speed book in the given column.
- IV. Do orals practice using all the formulae taught previously.

## 12. Speed writing

Speed writing section of the book is used to listen and write randomly called out numbers, oral sums practice and for speed writing practice of numbers. It is a very important exercise as it enables gaining speed and writing through coordination of fingers usage with the listening and practice. (Listening will improve the quality as well.)

- a. The level Exam for Starters to Stars is conducted at the end of 3rd month/level.
- b. The format of the question paper is given at the end of Book B'.
- c. There is no time limit for the Question paper. Just record the time taken by the child.
- d. Fingering exercises (Basic Exercises) done in level 2 must be done for at least 30 minutes.
- e. Oral sums must be dictated for at least 15 minute.
- f. Start teaching students Tables (2 to 9).

## 13. Combination



## 14. Abacus placement during level exam / competition

**Right Handers :** Abacus must be placed vertically on the left hand side, pencil on the right hand side and Question paper must be placed in between both with the written part facing down words. When Abacus tutor says “**Ready**” the students must hold abacus with Left hand, pencil with right and tip of the paper with the right hand. When Abacus tutor says “**START**” the students must flip the paper over and place the abacus on top of the paper and start doing. The minute the Abacus tutor says “**STOP**” paper must be flipped back to position pencil and abacus on the table and hands on the lap.

**Left Handers :** Abacus and Pencil must be placed vertically on the left hand side.

## 15. Six Rules Of Reckoning With Both Hands

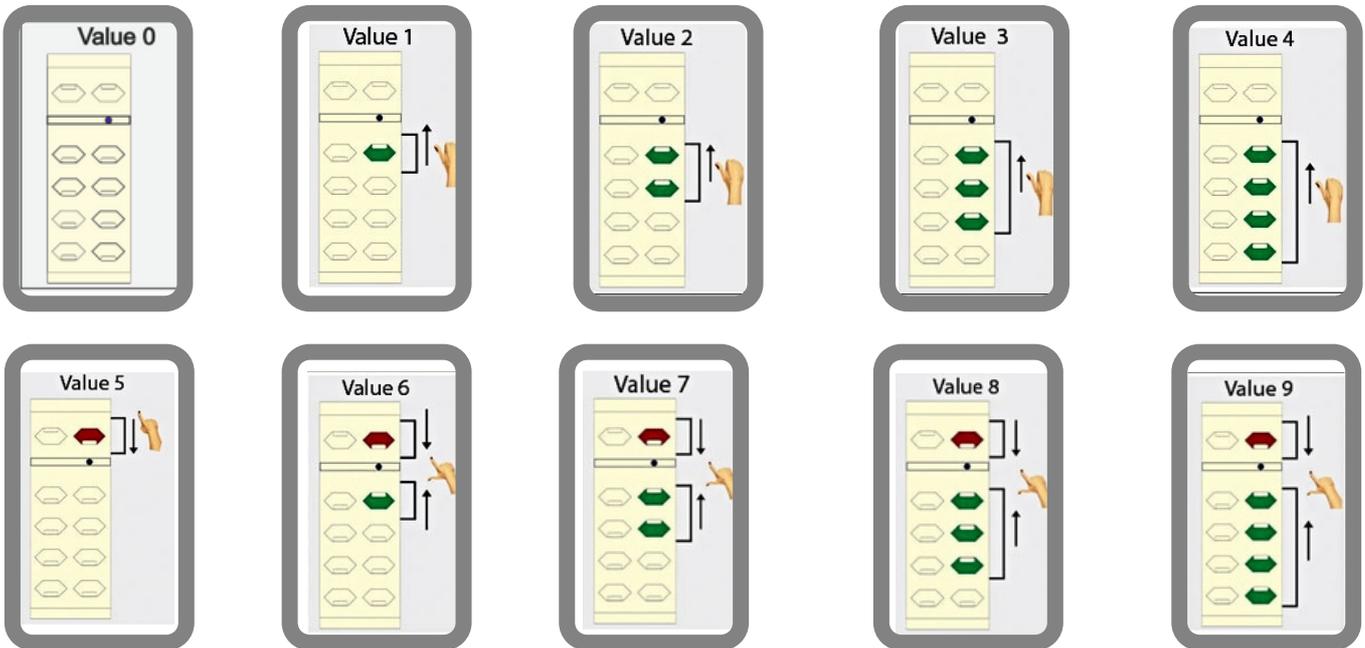
- i. Add in
- ii. Takeoff
- iii. Add upper and Less lower Sliders simultaneously
- iv. Add Lower and Less Upper Sliders simultaneously
- v. Combination of taking off from Lower and adding up to a higher order column.
- vi. Combination of taking off from Higher order and adding up to a Lower order column.

## 16. Image Flash

**Image Flash** is an activity which is done to give a larger scope for the students to read the Abacus slider images representing values using which the students could have extended practice and also better assessment of their skills in reading the values of images at a speed. The advent of the Indian Abacus program now the students have the scope to view a limitless number of images. With the usage skills to read the constantly changing image values, students experience better challenges which ultimately enhance their Visuospatial memory skills, necessary to perform better in doing faster and more accurate mental arithmetic skills by an image of an Abacus. Speed and accuracy in performing Mental Arithmetic by image of an Abacus indirectly reflect their concentration and memory skills.

The Abacus Tutor during the “**Image Flash**” session alerts the students to focus on the activity of reading the values of slider images. The Abacus tutor would after saying “**Start**” manipulate the sliders of the tool - “Indian Abacus – Tutors” continuously to make the students read the images one after the other and write down the number-value of each of such images flashed on the Tutor's Abacus and they should write the number values on their notebooks. The Tutor actually writes down a series of numbers – Single, double, triple, 4 digits, as the case may be, on a paper first and during the activity she would manipulate the sliders looking at the numbers she wrote down which the students read and write.

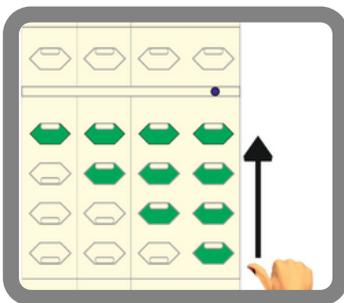
## 17. Value of Sliders



## 18. Manipulation with Right Hand

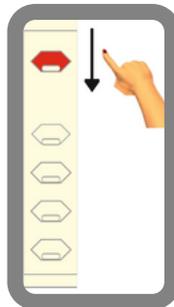
1 2 3 4

Add lower slider using Thumb



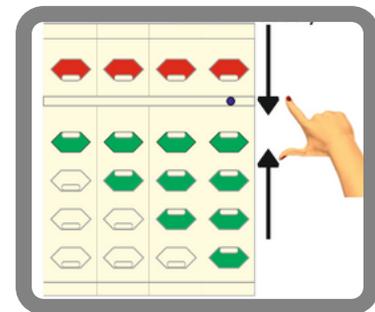
5

Add Upper slider using Index



6 7 8 9

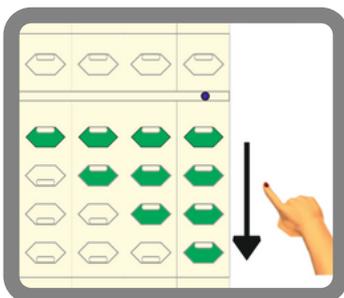
Add Simultaneously



Add upper slider and lower slider using thumb and index simultaneously

1 2 3 4

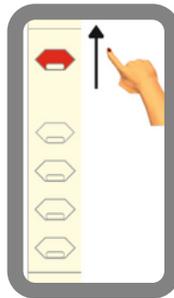
Less lower slider



Minus using Index

5

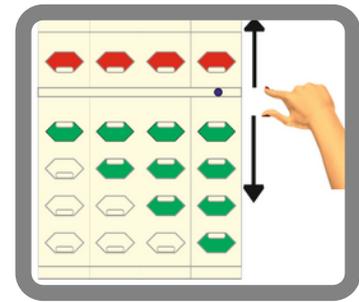
Less Upper slider



Minus using Index

6 7 8 9

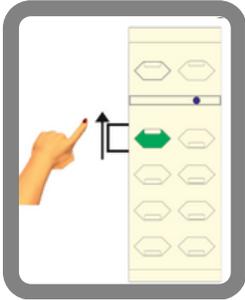
Less Simultaneously



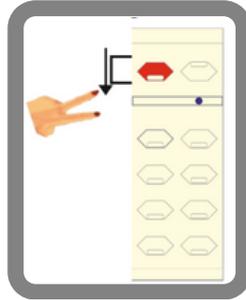
Minus using Thumb and Index Simultaneously

## 19. Manipulation with Left Hand

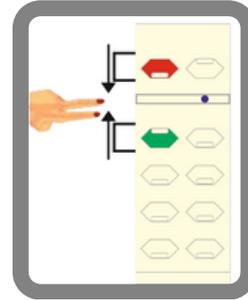
Add / Subtract  
Lower slider using Index



Add Upper slider  
using middle finger



Add Upper slider  
& Lower Simultaneously



## 20. Fill In Sliders And Values

5	
2	
7	

5	
4	
9	

5	
1	

5	
3	

5	
2	

5	
4	

5	
4	

5	
1	

5	
4	

5	
2	

## 21. Fill in the box

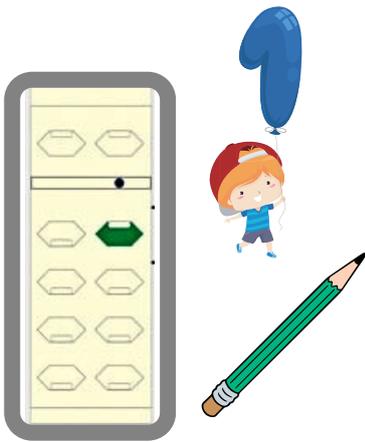
SMALL	FRIEND
1	
2	
3	
4	
3	
2	
1	
4	
2	
1	
3	
4	
1	
2	
4	
3	
1	
2	
4	
3	

SMALL	FRIEND
2	
1	
	2
3	
	4
	1
4	
2	
	3
3	
1	
	1
	4
2	
4	
	3
	1
	2
1	

BIG	FRIEND
1	
2	
3	
4	
5	
6	
7	
8	
9	
2	
4	
1	
6	
5	
3	
8	
9	
7	
5	
2	

BIG	FRIEND
	3
1	
	2
6	
4	
	1
3	
	6
5	
	7
	8
7	
	5
8	
	4
1	
9	
	3
2	

22. Relationship Between Numbers And slider/s



Pencil



Ice Cream



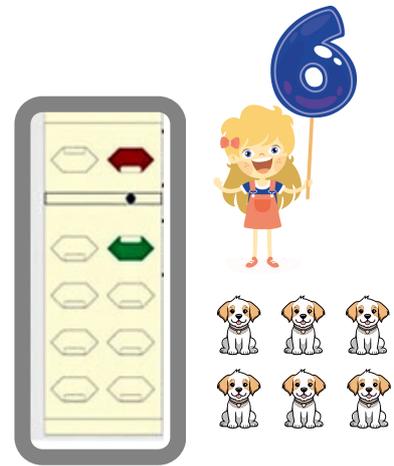
Glass



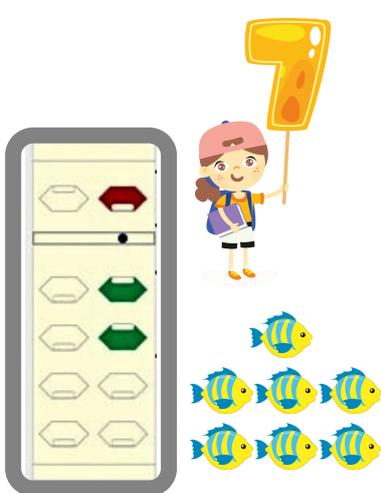
Cat



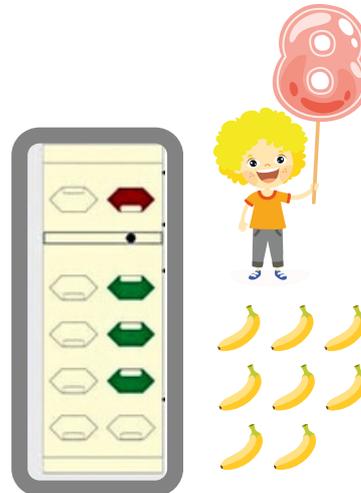
Bus



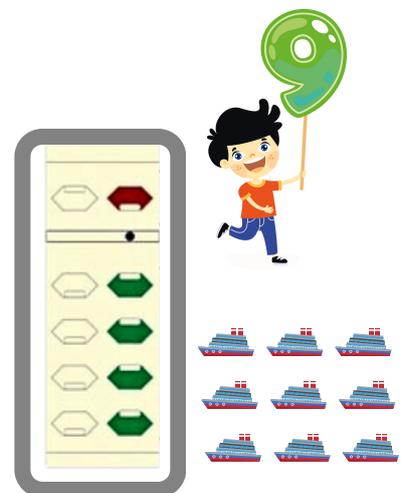
Dog



Fish



Banana



Ship

## 23. Composition Of 5

$5 = 1 + 4$  Butterfly

$5 = 2 + 3$  Tea Cup

$5 = 4 + 1$  Shirt

$5 = 3 + 2$  Flower

## 24. Composition Of 10

$10 = 9 + 1$  Pen

$10 = 8 + 2$  Specs

$10 = 7 + 3$  Gift

$10 = 5 + 5$  Ball

$10 = 4 + 6$  Book

$10 = 3 + 7$  Car

$10 = 2 + 8$  Duck

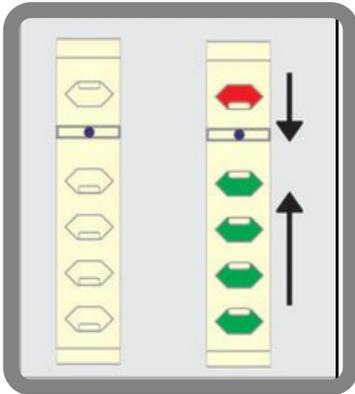
$10 = 6 + 4$  Balloons

$10 = 1 + 9$  Cap

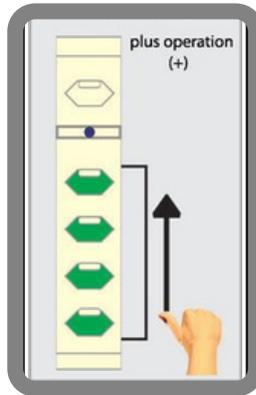
## 25. Operation of Abacus for Addition

### i. Plus (+) Operation

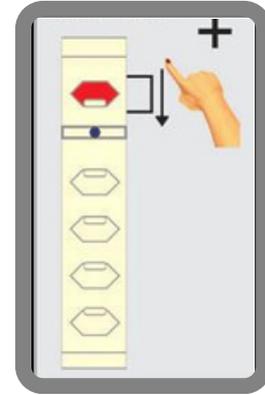
When the slider/s moves towards the answer bar it assigns the value, it is for plus operation.



This picture displays two unit pointer of the **7th column**, the first unit pointer column represents **zero position**. The second unit pointer column displays slider movements towards the answer bar for plus operation, which represents units value.



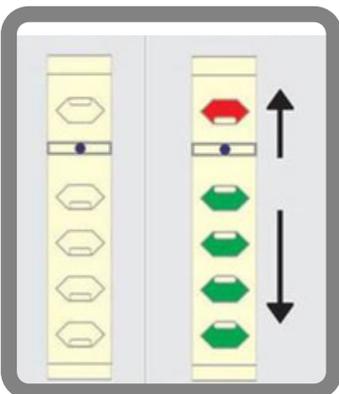
**Use right hand thumb to move lower slider** in the 7th column towards the answer bar for plus (+) operation.



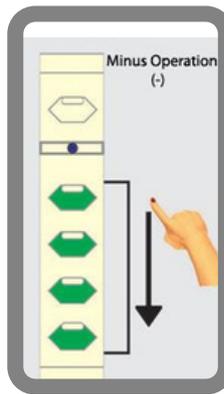
**Use only index finger to move the upper slider** in the 7th column, towards and away from the answer bar for both plus and minus (+ & -) operations.

### ii. Minus (-) Operation

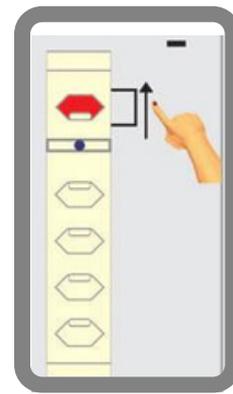
When the slider/s moves away from the answer bar it does not assign any value, it is minus operation



The **first unit pointer** column displays slider movements away from the answer bar for minus operation, which represents zero value. The second unit pointer column displays **zero position**.

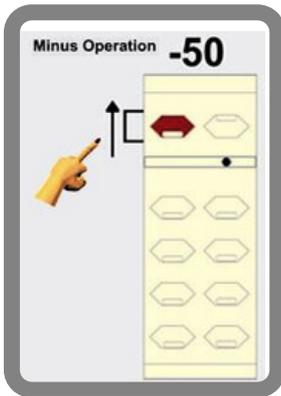


**Use right hand index finger to move lower slider** in the 7th column away from the answer bar for minus (-) operation.



**Use only index finger to move the upper slider** in the 7th column, towards and away from the answer bar for both plus and minus (+ & -) operations.

## 26. Operation of Abacus for Subtraction:



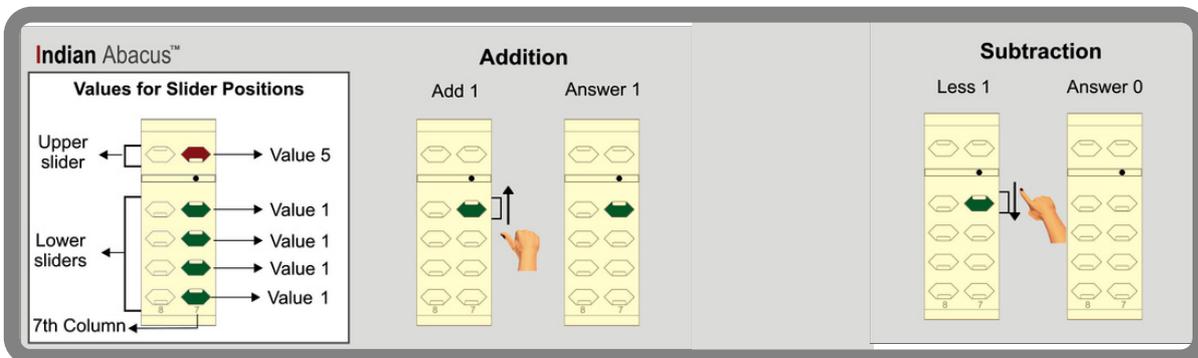
1. When the slider/s moves away from the answer bar it does not assign any value, it is for Minus (-) operation.
2. Use right-hand index finger to move the lower slider, away from the answer bar for the minus (-) operation.
3. Use only your index finger to move the upper slider, away from the answer bar for Minus (-) operations.
4. Left hand index finger must be used to move the lower slider away from the answer bar for -10 to -40.
5. Use left-hand middle finger to move the upper slider away from the answer bar for Minus (-) operation, i.e. -50.

## 27. Values of sliders from Column of Abacus:

The 7th column facing the unit pointer is considered as **Unit / Home column (or any pointer)**. The upper slider represents the value as Five (5) of this column and the lower slider represents the value as one (1) each. The sliders set in this column assign value "one" each, together displays.

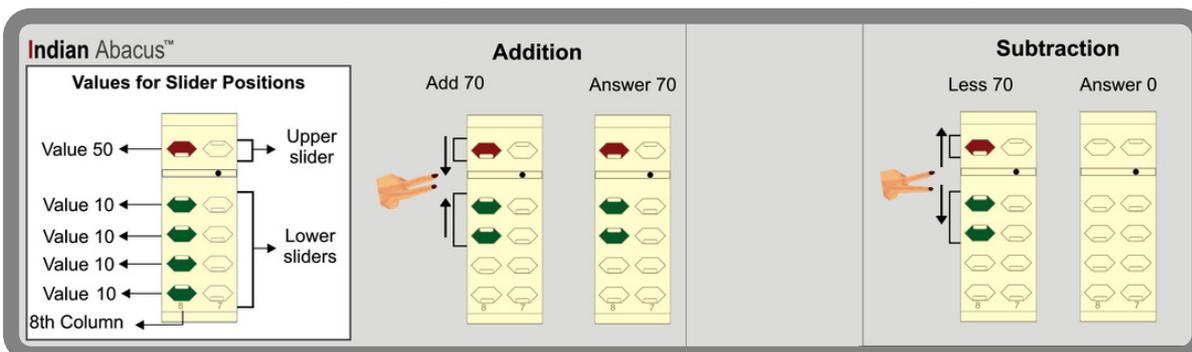
- i. **Addition:** Move lower slider towards the answer bar using right hand thumb in the 7th / home column as shown in the picture.

**Subtraction:** Move lower slider away from the answer bar using right hand index finger in the 7th / home column as shown in the picture 1.



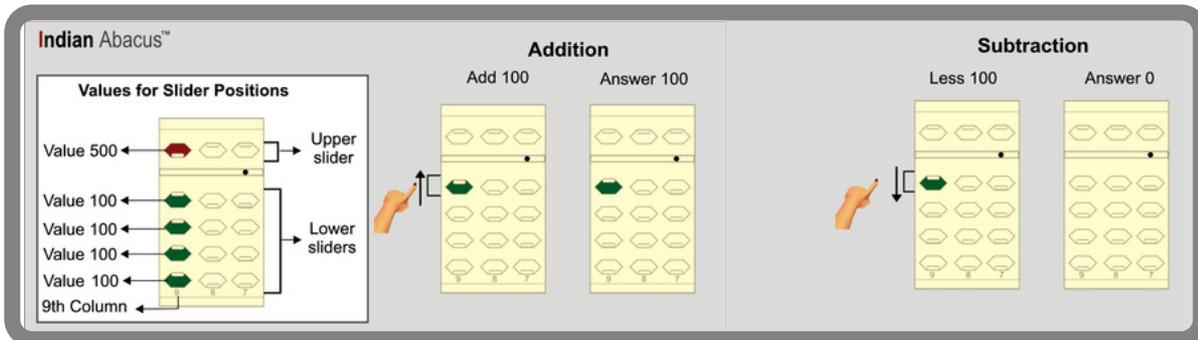
- ii. **Addition:** Move upper and 2 lower sliders together towards the answer bar using left hand middle and index fingers together in the 8th column as shown in the picture.

**Subtraction:** Move upper and 2 lower sliders together away from the answer bar using left hand middle and index fingers together in the 8th column as shown in the picture.70.



iii. **Addition:** Move a lower slider towards the answer bar using left hand index finger in the 9th column as shown in the picture.

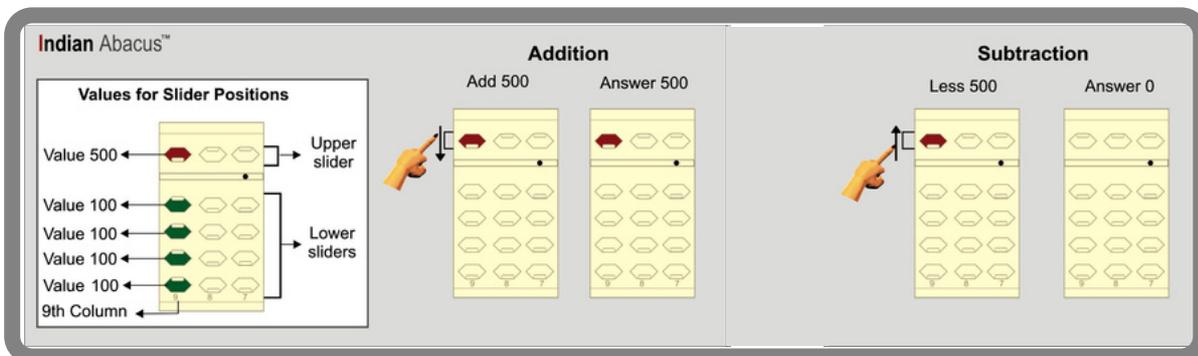
**Subtraction :** Move a lower slider away from the answer bar using left hand index finger in the 9th column as shown in the picture **100**.



iv. The **7th column** on the left side gets increased with ten times more value. The upper slider represents the value as Five hundred (500) of this column and the lower slider represents the value as One hundred (100) each. The slider moved towards the answer bar on this column gets increased by the value as ten times more, example

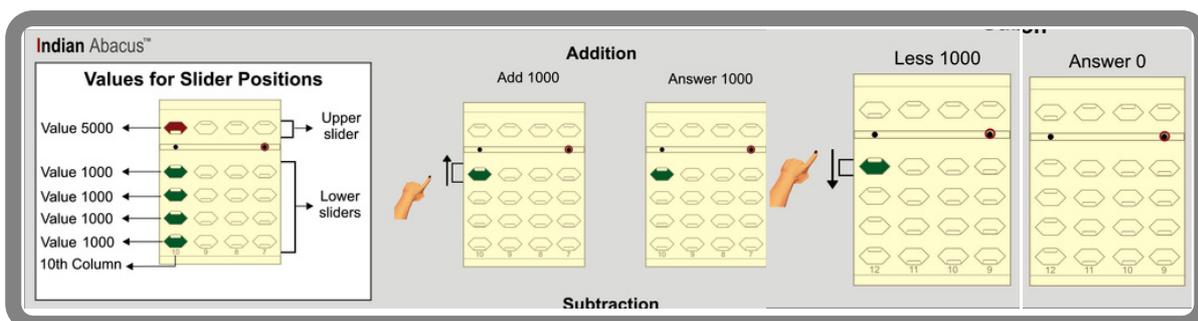
**Addition:** Move upper slider together towards the answer bar using left hand middle finger in the 9th column as shown in the picture.

**Subtraction:** Move upper slider together away from the answer bar using left hand middle finger in the 9th column as shown in the picture **500**.



v. **Addition:** Move a lower slider towards the bar using left hand index finger in the 10th column as shown in the picture.

**Subtraction:** Move a lower slider away from the bar using left hand index finger in the 10th column as shown in the picture **1000**.



## 28. Overview: Product, Program, Training and Activities

Indian Abacus Pvt. Ltd., the pioneer in the field of Abacus-based math and Skill development training, since 1999. Indian Abacus company has launched its newly invented (2012) **State-of-the-art Indian Abacus tools** for students and tutors and the program to make children of the age group – 3 to 13 years and LKG and UKG, benefit much more than ever before.

1. **Salient features** of the products is, Unhide and hide the colour images: The student while operating this Abacus moves the Lower and the Upper sliders to unhide and hide the colour images which represent values.
2. **The lower sliders** when moved towards the answer bar unhide and display Green colour images.
3. **The upper sliders** when moved towards the answer bar unhide and display Red colour images.
4. **The display of colour images** and specific values makes the visualization many times better, stronger, faster, stress-free and error-free calculation when compared to the earlier Abacus.
5. **The sliders stay put in the positions** when the Abacus is vertically viewed while working and values don't get changed the Sliders are stable and firm and thereby the answers will be perfect.
6. **Zero value positions:** The slider's position showing colours which sink with cream colour back round is considered as zero value position which is logically possible when the sliders are closed or hidden.
7. **Stress-free view:** The colour and non-colour positions of the slider remove the confusion and the disturbing view thereby understanding and Memory registry easier.
8. **Time-saving in the classroom:** The Tutor can identify the answers from their place without moving to the student area when the answers are shown by the students sitting in their place because the sliders do not fall and thus the students are able to do more sums due to time-saving.
9. **Indian Abacus tool for Tutor** can be used in the Play Schools (LKG/UKG) to teach numbers as a learning apparatus of the younger children of the age group 3 - 5 years.
10. **Visualization is image capture:** Keeping these vital questions in mind and working towards Flash card-like abacus value positions, the Indian Abacus came into its very clearly defined design and structure after a great deal of deliberations, trials and errors and a series of rough-work design structures.
11. **The skills beyond just the calculations:** Abacus students outperform non-abacus students in mental arithmetic calculations, demonstrating that mental manipulation of sliders enhances skill quality with lesser effort, resulting in a faster and more qualitative visualization process.
12. **Enhanced quality of Visualization:** The colour images projected by the operation of the upper or lower sliders through their upper and/or lower movements toward the answer bar actually represent the value positions.

# BRAIN FUNCTIONS AND BENEFITS

## 1 THE GENIUS OF YOUR UNBORN BABIES DEVELOPMENT

2  
3  
VISION  
ANALYSIS  
LOGIC  
COMPREHENSION  
PHOTOGRAPHIC MEMORY  
ENDURANCE



7  
8  
9  
5  
6  
MATHS  
IMAGINATION  
APPLICATION  
DILIGENCE  
DISCOVERY  
SELF - RELIANCE  
SELF - CONFIDENCE  
HEARING

0  
4  
8  
ABILITY TO REMEMBER THINGS  
ABILITY TO APPLY ONESELF  
ABILITY TO WITHSTAND STRAIN  
ABILITY TO SEE  
GRASPING CAPACITY  
ACT OF LISTENING  
SCIENCE OF REASONING  
ACT OF INVENTION  
CONFIDENCE IN ONE'S OWN CAPACITY  
TO WORK WITH CARE AND EFFORT  
DETAILED EXAMINATION  
FORM A MENTAL PICTURE

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