



ATAL INNOVATION MISSION

# ATL DIY Inter-School Challenge

Theme: Innovation & Empathy

12 October 2020 – 11 December 2020

in association with



Self-Learning Manual: Activity X

Cognitive skills: Vedic Mathematics

Std.: IV-V years

## Activity description and self-learning manual

### Activity X: : Record 1 video of child explaining 1 Vedic Maths trick



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# ATL DIY Inter-School Challenge 2020

Theme: Promoting Innovation & Empathy



Cognitive skills

Vedic Mathematics

Std. IV-V

### Activity X: Record 1 video of child explaining 1 Vedic Maths trick

Vedic Mathematician



$$\begin{array}{r} 24 \\ \times 35 \\ \hline \end{array}$$

$$\begin{array}{r} 39 \\ \times 96 \\ \hline \end{array}$$

$$\begin{array}{r} 73 \\ \times 19 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \\ \times 54 \\ \hline \end{array}$$

Learn Vedic Maths method for multiplication of 2 digit numbers with each other.

Record your video explaining the concept using two examples for the method.

Upload the files as per the instructions in the self-learn manual.

[www.kid-ex.com](http://www.kid-ex.com)

#### Activity description

The child is required to learn 1 simple Vedic Math trick to multiply any two double-digit numbers. The child should record a video explaining the Vedic math trick to a third person using two examples.

The child will have to understand the trick, as mentioned in the learning material. With practicing and checking by performing the activity with many numbers, they can learn the trick very well. This will enable them to solve such questions very quickly in the future. They can then be the tutor themselves and explain this trick to others as well through a video of their own!

While teaching or explaining the trick in the video, you must use numbers which have not already been covered in the examples given in the learning material. This will ensure that you have grasped the concept and can solve any possible problem on the same lines.

Do this exercise as an engagement exercise with the child for a few days or let the child do it independently if the child can. Whenever you think the child is ready, record one video of the child explaining the Vedic Math trick by demonstrating 2 examples on paper to explain the trick well in the same video itself.

The video should be submitted as an entry as per submission guidelines.

#### Evaluation guidelines

The maximum point for this activity is 20. Every entry would be rated as either:

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1. Master (M): 100% score
  - a. The child can explain the entire concept correctly for two examples using double-digit numbers
2. Intermediate (I): 80% score
  - a. The child can explain the entire concept correctly for one example only using double-digit numbers
3. Beginner (B): 50% score
  - a. The child can explain the entire concept partially for one example only using double-digit numbers
4. Not applicable (NA): 0% score
  - a. All other submission cases
  - b. No submission

### Self-learning manual

Common mistakes and things to keep in mind in this activity are:

- Rote learning of the examples given in the video will not be enough to sharpen your mathematical acumen
- Practice and experiment multiple times with many numbers. This will help you understand the method thoroughly
- If foundation in Mathematics of child is not strong e.g. addition etc., the child might not be able to perform well
- Make sure that you understand the trick well. This will help you explain the trick with more clarity
- Child is not in the right mindset while learning. They will learn and enjoy the process if they are in a happy mood.

Key coaching tip to excel in this exercise is that the child should try to attempt the operation given in the activity (multiplication) using many different numbers. They should try to solve using the traditional ways that they are used to and then solve the same using the Vedic math method. This will give you the idea of how much time saving could be done for solving the same problems.

As beneficial as these methods are for faster calculations, you must also know the usual method as taught by parents and in school. Consider these tricks as supportive tricks and not a substitute for the other methods. The more methods you excel at, the sharper your cognitive skills will be!

### Learning Material

What is Vedic math?

Vedic math was discovered by Shri Bharati Krishna Tirthaji during his extensive research on the Vedas. Vedic math consists of 16 Sutras or word formulae and 13 sub-sutras (sub formulae) which can be used for solving mathematical problems in a far simpler manner. The sutras help in the branches of arithmetic, algebra, geometry, and calculus. It offers techniques and shortcuts to master numerical calculations very quickly. Using these techniques, it is possible to calculate 10-15 times faster than usual methods. The difficult problems or huge sums can be solved almost immediately by the Vedic method.

### Vedic Math trick

#### Multiplication of two 2-digit numbers

Here is a [video tutorial](#) for the Vedic Math trick to multiply two 2-digit numbers very quickly. This will help you understand the trick very well.

Key benefits of this exercise are:

- Vedic Maths is claimed to be 1500% faster than normal maths
- Increases speed and accuracy while solving problems
- Improved academic performance and instant results
- Sharpens your mind, increases mental agility and intelligence
- Increases visualization and concentration in children

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- Working with these formulae is healthy for the mind as they guide a way the mind naturally works and are therefore proved to be helpful in directing the student to the appropriate method of solution
- Helps in tests, quizzes and competitive exams by giving them a competitive edge, a way to optimize their performance and gives them an edge in mathematics and logic
- Helps the child become a mental calculator

### Submission guidelines

Key guidelines for submission:

- Record 1 video of the child
- Aim to keep the total video size less than 20 MB
  - Android users can install & use [Camera MX player](#) to record smaller size video files
  - Iphone users can change resolution setting by going to Settings -> Camera & selecting lowest resolution from "Record Video" option
- Submit the video on:
  - KidEx website
    - Visit [here](#) & upload the files following the instructions

Feel free to share the picture with family, relatives, and close friends as you desire using [KidEx app](#). [KidEx app](#) allows you to add any family member, friend or relative as 1st Circle, 2nd Circle or 3rd Circle in the app itself & mark every post's sharing circle i.e. share with 1st Circle only, or 1st & 2nd Circle, or 1st, 2nd & 3rd Circle. You can post the videos from [KidEx app](#) on social media platform of your wish as well.

KidEx app is a private sharing app which enables you to store images/videos of the growing kid at one place & access them easily. The app makes it super convenient for family members & closest friends to access images/videos of the kid as every kid has a dedicated page (if created by their parents). You may save kid's art work, performances, achievements proofs, medical records etc. conveniently in one place.

You can download KidEx app by clicking [here](#)

For any queries, you may email us at [info@kid-ex.com](mailto:info@kid-ex.com).