# Proposal on Math Lab Shree Halchowk Madhyamik Vidyalaya (Secondary School) 

Halchowk, Swyambhu



School Area


School

## Introduction

Halchowk Madyamik Vidhyalaya (Secondary School) is situated in Halchowk, Ward 3, Shree NagarjunNagarpalika,West of Kathmandu Valley, East of Nagarjun Jungle, North of Sitapaila and South of Halchowk Bhariab Temple. This is a government school. The environment of the area is very good. There are more indigenous Newar community people such as Putuwar, Nagarkoti, Rajbahak etc who are deprived from basic education and awareness. There are more financially deprived children. Most guardians are laborers.

Shree Halchowk Secondary School was established in 1979 (2036 B.S.). The school has 2 buildings, 3 trusses with total of 13 rooms, one hall and two toilets (one for boys, one for girls). There are total of 266 students, 20 teachers and 3 general staff members. The Principal of this school is female and she is trying her best to improve the school.


Students Playing
The school is focusing to provide quality education to the children. With the development of technology and information the school plans to installed computers and provide access to internet to all the students. It is also planning to change provide good physical infrastructures including desks, benches, more toilets, drinking water facility, good library, and science labs and math lab as per the needs of the students. All the infrastructures is planning by doing by school management with the help of others partners organization. So the school management is requesting for the installation of math

Lab in the school. The math lab provides an opportunity for the students to discover mathematics through doing. Many of the activities present a problem or a challenge, with the possibility of generating further challenges and problems. The activities help students to visualize, manipulate and reason.

## Objective:

1. To provide hands on learning opportunities for the students.
2. To motivate students to master math skills and problem solving techniques.
3. To improve the students' ability to learn mathematics.

## Action Plan:

| S.N | Activities | Date | days | who | What to do | How |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Group Discussion of the <br> Committee Members |  | 2 | Committee <br> Members | Discussion | Meeting |
| 2 | Research and list the <br> Math Equipment |  | 10 | Committee <br> Members | Discussion | Meeting |
| 3 | Research in the market <br> for the pricing |  | 3 | Committee <br> Members | Visit Market | Visiting |
| 4 | Buy the math equipment <br> from selected shop |  | 2 | Committee <br> Members | Visit Market | Buying |
| 5 | Transport Equipment in <br> the school premises |  | 1 | Committee <br> Members | Transporting | Through <br> Vehicle |
| 6 | Installed equipment in <br> the market |  | 2 | Committee <br> Members | Installation | Field Work |
| 7 | Ready for use.... |  | $\ldots$ |  <br> teachers | Practical...... | $\ldots . . . .$. |

## Budgeting

| SN | Math Equipment | Quantity | Rate | LSF <br> Share | School <br> Share | Total |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | Set of 125 pcs. in 5 colors | 1 | 755 | 755 | - |  |
| 2 | Decimal Abacus 70 beads <br> with 7 wires | 1 | 755 | 755 | - |  |
| 3 | 3 D Paper Nets | 1 | 411 | 411 | - |  |
| 4 | Transparent Geoboard <br> 11cm*11 cm | 1 | 377 | 377 | - |  |
| 5 | Double Sided Geoboard | 1 | 497 | 497 | - |  |
| 6 | Geo Geometry Stick(Set of 24 <br> pcs) | 1 | 3123 | 3123 | - |  |
| 7 | Geometry Kit(set of 7 sticks) | 1 | 480 | 480 | - |  |
| 8 | Exterior Angle of Regular <br> Polygon | 1 | 1,355 | 1,355 | - |  |
| 9 | Construction Parabola | 1 | 514 | 514 | - |  |


| 10 | Cyclic Quadrilateral | 1 | 669 | 669 | - |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | - |  |
| 11 | Angle Sum Property of Quadrilateral | 1 | 669 | 669 | - |  |
| 12 | Angle Sum Property of triangle | 1 | 446 | 446 | - |  |
| 13 | Ratio of Area of similar Triangle | 1 | 446 | 446 | - |  |
| 14 | Color Figures (3D Shapes) | 1 | 560 | 560 | - |  |
| 15 | Area of Circle - Same as derivation of pie | 1 | 531 | 531 | - |  |
| 16 | Base Ten Stamp Set (set of 4 pcs) | 1 | 926 | 926 | - |  |
| 17 | Base Ten Stamp Set (set of 4 pcs) | 1 | 926 | 926 | - |  |
| 18 | Decimal Kit | 1 | 909 | 909 | - |  |
| 19 | Cuisenaire Strips | 1 | 1,046 | 1,046 | - |  |
| 20 | Factorixation Tiles | 1 | 772 | 772 | - |  |
| 21 | Integer Counter 18 mm (set of 100 pcs. In 2 color) | 1 | 909 | 909 | - |  |
| 22 | Tangram Plastic | 1 | 737 | 737 | - |  |
| 23 | Magnetic Fraction Bar | 1 | 1,990 | 1,990 | - |  |
| 24 | Magic Ring - Angle in a Circle | 1 | 360 | 360 | - |  |
| 25 | Measuring Tape 3 Meter | 1 | 360 | 360 | - |  |
| 26 | Wall Thermometer | 1 | 566 | 566 | - |  |
| 27 | Jug \& Beaker | 1 | 600 | 600 | - |  |
| 28 | Spring Balance | 1 | 205 | 205 | - |  |
| 29 | Palm Clock | 1 | 247 | 247 | - |  |
| 30 | Plastic Dice (set of 4) | 1 | 154 | 154 | - |  |
| 31 | Junior Pythagoras Theorem | 1 | 514 | 514 | - |  |
| 32 | Working Model of Pythagoras Theorem | 1 | 3,329 | 3,329 | - |  |
| 33 | Case $1(\mathrm{a}+\mathrm{b}+\mathrm{c}) 2$ | 1 | 1,647 | 1,647 | - |  |
| 34 | Case 2 (a+b)2-(a-b)2 $=4 \mathrm{ab}$ | 1 | 1,647 | 1,647 | - |  |
| 35 | Cubic Identity | 1 | 2,930 | 2,930 | - |  |
| 36 | Algebra Tiles Magnetic | 1 | 2,917 | 2,917 | - |  |
| 37 | Clinometer Compass | 1 | 1,252 | 1,252 | - |  |
| 38 | Place Value Board Multiplication | 1 | 686 | 686 | - |  |
| 39 | Place Value Board Multiplication | 1 | 686 | 686 | - |  |
| 40 | Ascending Card Game | 1 | 686 | 686 | - |  |
| 41 | Descending Card Game 1 | 1 | 686 | 686 | - |  |
| 42 | Division Board | 1 | 686 | 686 | - |  |
| 43 | Factor Board | 1 | 686 | 686 | - |  |
| 44 | Number Card | 1 | 686 | 686 | - |  |
| 45 | Arithmetic Progression Kit | 1 | 2,076 | 2,076 | - |  |
| 46 | Geometrical Progression Kit | 1 | 2,076 | 2,076 | - |  |
| 47 | Magnetic Bottom | 1 | 650 | 650 | - |  |
| 48 | Magnetic Board (3*4) | 1 | 7,000 | 7,000 | - |  |
| 49 | Graph Board (2*3) | 1 | 3,900 | 3,900 |  |  |
| 50 | Cupboard | 2 | 20,000 | - | 40,000 |  |


| 51 | Table | 5 | 5,000 | - | 25,000 |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 52 | Transportation |  | 5,000 |  | 5,000 |  |
| 53 | Communication |  | 2,000 | - | 2,000 |  |
| 54 | Miscellaneous |  | 5,000 | - | 5,000 |  |
|  | Total |  |  | $\mathbf{5 7 , 0 3 5}$ | $\mathbf{7 7 , 0 0 0}$ |  |
|  | VAT 13\% |  |  | 11,407 |  |  |
|  |  <br> reporting | Grand Total |  |  | $\mathbf{7 5 , 8 5 7}$ <br> $\mathbf{( 4 9 . 6 \% )}$ | $\mathbf{7 7 , 0 0 0}$ <br> $\mathbf{( 5 0 . 4 \%})$ |
|  | $\mathbf{1 5 2 , 8 5 7}$ |  |  |  |  |  |

## Monitoring \& Evaluation

According to the decision of the Math Lab Project Committee, the school management committee will observe the project in running phase and as well as in the completion of the project. The committee will submit the progress of the work frequently. The follow up will be done through school management in oversee of the math lab project committee.

## Committee Members:

1. Karuna Tiwari (ACM) - Leader
2. Gyanda Adhikari (Principal) - Leader
3. Chanda Gajurel ( Math Teacher) Member
4. Kausalya Satyal ( Math Teacher) - Member
5. Laxman Neupane (Math Teacher) - Member
6. Pradeep Acharya ( Math Teacher) - Member
7. Supriya Putuwar (LSF/E4E Girl) - Member
8. Anushka KC (LSF/E4E Girl) Member
