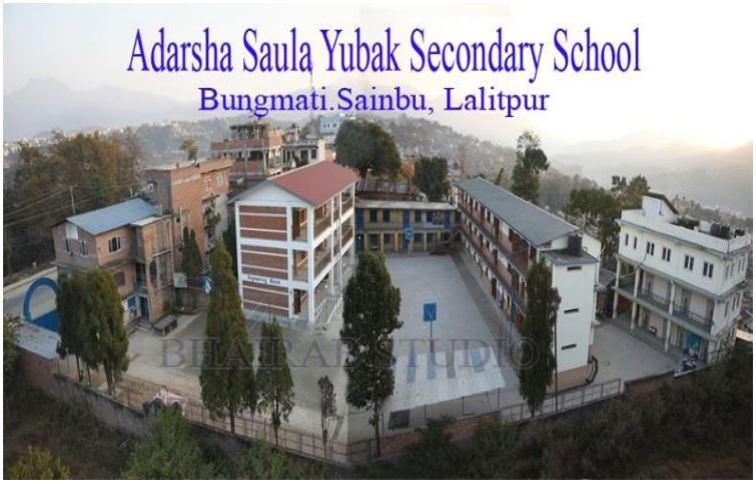
Proposal on School Science Lab

Aadarsha Saula Yubak Secondary School

Bungamati, Lalitpur



Introduction

Aadarsha Saula Yubak Secondary School was established in (1970) 2026 B.S. It is located in Lalitpur district of Karyabinayak Municipality-25, Bungamati which is 8.3 km far from Kathmandu. Bungamati is a Newar town on a spur of land overlooking Bagmati River. This town is naturally as well as culturally beautiful. This town now has mixed demography which includes Newar, Brahmin, Chhetri, Tamang, Gurung, Limbu and many more. Population of this town is approximately 5,720 (census, 2011). It is the hometown of the deity Rato Machhindranath, regarded as the patron of the valley. The town is famous for woodcarvers and the craftsman along with different places of religious importance.

Aadarsha Saula Yubak Secondary School is one of the best schools in the area and has been providing quality education to the students of the area from many years with the motto 'School is a learning centre.' The principal of the school is Mr. Saroj Bhakta Acharya and the management is co-operative. The total number of students in the school is about 1,800 with about 105 teaching staffs and 10 non-teaching staffs. The school has been divided into two blocks: block A where the students up to Grade 5 are taught including bachelor's and master's students, block B where the students up to Grade 12 are taught consists of four buildings. Even school is big with many students there is not proper science lab and students are not getting opportunity to do practical class what they have learn in theory class. The main purpose of establishing science lab in the school is to provide practical knowledge to the students. Science lab in the school has been lagging from some years due to lack of the essential equipments. This also will build leadership quality in the students and help them learn better.

Objectives

- To provide practical knowledge to the students.
- To help the students use the models and equipments to understand the scientific concepts and theories.

Action plan: (flexible dates based on funding)

Activities	**Date**	**Days**	**Who**	**What to do**	**How**
School management committee, teachers and students meeting to discuss about the equipment	March 5 -6, 2021	2	Committee members	Dicussion about the required lab equipments	Discussion
Research in the market about the science equipment	March 15 – 20, 2021	6	Committee members	Research in the market	Visiting
Buying science equipment needed for lab	April 1 - 3, 2021	3	Committee members	Buy lab materials	Purchase
Collect all bought science equipment in school	April 4, 2021	1	Committee members	Collecting all the materials	Collection
Started to decorate science lab	April 5 – 10, 2021	6	Committee members	Working in the room	Decoration
Make ready to put equipment in science lab room	April 11 – 12, 2021	2	Committee members	Arranging the lab materials	Arrangement
Ready to use science lab by the students	April 15, 2021				

Budget:

S.N	Particulars	Packing	Quantity	Unit Rate	LSF/E4E	School	Total
	Biology						
1	DNA model	Set	1	1850	-	1850	1850
2	Ear model	Set	1	1200	-	1200	1200
3	Educational charts	pc	1	350	350	-	350
4	Eye model	Set	1	650	650	-	650
5	Heart model	Set	1	650	650	-	650
6	Human Skeleton model; 1 ft, plastic	pc	1	650	650	-	650
7	Kidney model	pc	1	650	650	-	650
8	Lungs model	pc	1	650	650	-	650
9	Microscope, compound	Set	2	6500		13000	13000
10	Museum specimens, common type	pc	1	485	485	-	485
11	Museum specimens, rare type	pc	1	575	575	-	575
12	RNA model	Set	1	1850	-	1850	1850
13	Teeth model	pc	1	1550	-	1550	1550
14	Prepared slides	pc	6	100	600	-	600
15	Glass slides	Pkt	2	95	190	-	190
16	Cover slip	Pkt	2	75	150	-	150
17	Glycerin	btl	5	425	2125	-	2125
18	Ethanol	btl	2	250	500	-	500
19	Dissection box	Set	2	1050	2100	-	2100
	Chemistry						

20	Acetic acid glacial	500 ml	1	475	475	-	475
21	Ammonia solution	500 ml	2	450	900	-	900
22	Ammonium chloride	500 ml	2	425	850	-	850
23	Beaker, 250 ml, Borosil	pc	5	150	750	-	750
24	Beehive shelf	Pc	3	110	330	-	330
25	Bunsen burner	Pc	3	550	-	1650	1650
26	Iron stand	set	3	875	-	2625	2625
27	Burette	50 ml	3	650	-	1950	1950
28	Calcium carbonate	500 gm	2	350	700	-	700
29	Calcium hydroxide	500 gm	2	350	700	-	700
30	Camphor	100 gm	2	650	-	1300	1300
31	Carbon rod	Pc	5	150	750	-	750
32	Conical flask, 250 ml, Borosil	Pc	3	250	750	-	750
33	Copper plate	Pc	3	150	450	-	450
34	Zinc plate	Pc	3	150	450	-	450
35	Copper Sulphate	500 gm	2	750	-	1500	1500
36	Cork, big	Pc	5	35	175	-	175
37	Cork, medium	Pc	5	25	125	-	125
38	Cork, small	Pc	5	20	100	-	100
39	Delivery tube	Pc	5	20	100	-	100
40	Distillation set	Set	1	2250	-	2250	2250
41	Dropper, plastic	Pc	5	15	75	-	75
42	Filter paper	Pkt	5	150	750	-	750
43	Formaldehyde solution	500 ml	2	375	750	-	750
44	Funnel, plastic	Pc	5	50	250	-	250

45	Funnel, glass	Pc	5	125	625	-	625
46	Gas jar	Pc	3	225	675	-	675
47	Glass rod	Pc	5	25	125	-	125
48	Hydrochloric acid	500 ml	2	575	-	1150	1150
49	Hydrogen Peroxide	500 ml	1	250	250	-	250
50	Iodine solution	125 ml	2	250	500	-	500
51	Iron metal	500 gm	2	350	700	-	700
52	Lime water	500 ml	2	250	500	-	500
53	Litmus paper red/ blue	Pkt	5	110	550	-	550
54	Magnesium ribbon	Roll	2	175	350	-	350
55	Manganese dioxide	500 gm	2	350	700	-	700
56	Marble chips	500gm	2	300	600	-	600
57	Measuring cylinder, 250 ml	Pc	5	250	-	1250	1250
58	Methyl orange	125 ml	2	220	440	-	440
59	Motor and pestle, 3”	Pc	2	350	700	-	700
60	Nitric acid	500ml	2	650	-	1300	1300
61	Overflow can	Pc	5	75	375	-	375
62	Overflow can, tin	Pc	5	175	875	-	875
63	Periodic table	Pc	2	450	900	-	900
64	PH Paper	Pkt	2	150	300	-	300
65	Phenolphthalein	125 ml	2	220	440	-	440
66	Pipette, Graduated, 5 ml	Pc	3	295	885	-	885
67	Pipette, Graduated, 10ml	Pc	3	315	945	-	945
68	Porcelain basin	Pc	5	85	425	-	425
69	Potassium chlorate	500 gm	2	850	-	1700	1700

70	Potassium hydroxide	500 gm	2	650	-	1300	1300
71	Rain gauze	Pc	1	850	850	-	850
72	Reagent bottle, 250 ml, plastic	Pc	5	125	625	-	625
73	Round Bottom Flask, 250 ml	Pc	3	250	750	-	750
74	Safranine	125 ml	1	250	250	-	250
75	Sodium chloride	500 gm	2	250	500	-	500
76	Sodium hydroxide	500 gm	2	550	-	1100	1100
77	Sodium metal	100 gm	2	450	900	-	900
78	Sodium thiosulphate	500 gm	2	350	700	-	700
79	Spirit	450 ml	5	150	750	-	750
80	Spirit lamp	Pc	5	150	750	-	750
81	Sulphuric acid	500 ml	2	650	-	1300	1300
82	Test tube, regular	Pc	20	25	500	-	500
83	Test tube, hard glass	Pc	10	55	550	-	550
84	Test tube holder	Pc	10	55	550	-	550
85	Test tube rack	Pc	5	110	550	-	550
86	Thistle funnel	Pc	3	85	255	-	255
87	Tong	Pc	2	175	350	-	350
88	Top pan balance	Pc	1	850	850	-	850
89	Tripod stand, small	Pc	2	225	450	-	450
90	Tripod stand, big	Pc	2	275	550	-	550
91	Volumetric flask, 250 ml	Pc	3	550	-	1650	1650
92	Wash bottle	Pc	5	140	700	-	700
93	Water trough	Pc	5	350	-	1750	1750

94	Woulfe's bottle	Pc	2	425	850	-	850
95	Zinc metal	100 gm	2	350	700	-	700
	Physics						
96	Atomic model	Set	1	1650	-	1650	1650
97	Bar magnet 2"	Pair	5	225	-	1125	1125
98	Bar magnet 3"	Pair	5	275	-	1375	1375
99	Bell jar	Pc	1	850	850	-	850
100	Concave/convex lens	Pc	5	85	425	-	425
101	Concave/convex mirror	Pc	5	85	425	-	425
102	Drawing board	Pc	5	650	-	3250	3250
103	Electric bell	Set	1	1150	-	1150	1150
104	Electric motor model	set	1	1150	-	1150	1150
105	Electromagnet	Pc	3	450	-	1350	1350
106	Glass slab	Pc	5	150	750	-	750
107	Horse shoe magnet	Pc	5	225	-	1125	1125
108	U – shaped magnet	Pc	5	225	-	1125	1125
109	Hydraulic press	set	1	2850	-	2850	2850
110	Hydrometer	Pc	1	6520	-	6520	6520
111	Inclined plane	set	1	1850	-	1850	1850
112	Laboratory thermometer	Pc	2	175	350	-	350
113	Lime tower	Pc	1	750	750	-	750
114	Magnetic compass	Pc	5	40	200	-	200
115	Magnifying lens	Pc	5	350	1750	-	1750
116	Max-min thermometer	Pc	5	550	-	2750	2750
117	Newton color disc	Pc	2	550	1100	-	1100
118	Ring and Ball apparatus	Set	2	350	700	-	700

119	Periscope	Set	5	550	-	2750	2750
120	Plane mirror	Pc	5	150	750	-	750
121	Prism, small	Pc	5	150	750	-	750
122	Prism, big	Pc	5	200	1000	-	1000
123	Pulley, single	Pc	1	150	150		150
124	Pulley, double	Pc	1	250	250	-	250
125	Pulley, triple	Pc	1	350	-	350	350
126	Room thermometer	Pc	3	250	750	-	750
127	Wind Mill model	Set	1	1550	1550		1550
128	Spring balance	Pc	5	250	1250		1250
129	Stop watch	Pc	5	350	1750		1750
130	Telescope	Set	1	9800	-	9800	9800
131	Wooden scale, meter	Pc	5	150	-	750	750
132	Dynamo model	Pc	1	1250	-	1250	1250
133	Gasoline	1 set	1	5000	5000		5000
134	Project Management	1	1	13009	13009		13009
				Total	**78,054 (47.8%)**	**85,395 (52.2%)**	**163,449**

Committee members:

1. Aastha Bajracharya (CM) - Leader
2. Saroj Bhakta Acharya (Principal) - Member
3. Ratna Prasad Ghimire (Teacher) - Member
4. Dharma Bhakta Thapa (Science Teacher) - Member
5. Prerana Thapa Magar (11) (LSF/E4E girl) - Member
6. Babita Adhikari (10) (LSF/E4E girl) - Member
7. Riya Rai (10) (LSF/E4E girl) - Member
8. Pramisha Rai (9) (LSF/E4E girl) - Member
9. Diya Khadgi (9) (LSF/E4E girl) – Member