

SPECIFICATIONS

FOR SUPPLY OF :

1. Math Kits for primary Schools.
2. Math Kits for Upper Primary Schools.
3. Science kits for Upper Primary Schools.

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SCO 104-106, SECOND FLOOR SECTOR- 34A,  
CHANDIGARH – 160034

## 1. Items of Primary Math Kit

S.No	Name of the Item	Description
1	Geometrical Solid shapes	Solid shisham wood models, 1 each, painted of following shapes: Cylinder and Cone each of same diameter (3") & height (6"); Sphere 3" diameter, Regular pyramid 4" side, Conical frustum (diameter 3" & 2" with height 4"), Cube 3"side, Cuboid 3" * 4" * 5". Sizes are approx.
2	Wall clock	Wall clock quartz dial size 12".
3	Geometrical instrument kit for teacher	<b>Contains:</b> plastic, Compass, divider, protector('D), set square, foot rod & duster.
4	Meter rod	(Wooden, Polished and fine finished). Length 1m + margins (minimum 5mm, on both sides of 0-100 cm marking), Thickness 4mm-5mm. Marking: 0-100cm markings (least count 1mm) on the edge length & corresponding. Inches (least count 1/16") on the other edge to be given.
5	Hanging squared Board	Black Hanging rolling squared board with dimensions 54" * 54".
6	Clinical Thermometer ISI	Clinical thermometer with scale in °C & °F: 35° C to 42° C (95° F to 108° F)
7	Geo Board	Plastic 9"X9" (dimensions), rectangular:

## 2. Items of Upper Primary Math Kit

S.No	Name of the Item	Description
1	Wall clock	Wall clock quartz dial size 12".
2	Measuring Tape (steel) 5 mtr	Markings 0-5 m marking (least count 1mm) on one edge. length and corresponding inches (least count 1/16" on the other edge to begin).
3	Meter rod	(Wooden, Polished and fine finished). Length 1m + margins (minimum 5mm, on both sides of 0-100 cm marking), Thickness 4mm-5mm. Marking: 0-100cm markings (least count 1mm) on the edge length & corresponding. Inches (least count 1/16") on the other edge to be given.
4	Geometrical Solid shapes (wooden)	Solid shisham wood models, 1 each, painted of following shapes: Cylinder and Cone of each of same diameter (3") & height (6"), Sphere 3" diameter, Regular pyramid 4" side, Conical frustum (diameter 3" & 2" with height 4") Cube 3"side, Cuboid 3" * 4" * 5".

5	Hollow Shapes	Hollow Metallic Cone and Cylinder, each of same radius (3") and height (6").
6	Working Model, showing surface Area of the sphere	model showing surface area of sphere consisting of 3" diameter sphere (cut in two equal halves).
7	Measuring Cylinders (1000ml, 500ml one each)	(Polypropylene 1 <sup>st</sup> grade, 1000ml, 500 ml) one each
8	Chrome plated weights	Chrome plated Iron, 1gm, 2gm(2 No.), 5gm, 10gm, 20gm (2No.), 50gm, 100gm
9	Chart showing proof of Pythagoras Theorem	Colourful, Laminated, roller on two sides, 60cmx45cm
10	Chart showing sum of angles of a triangle 180	Colourful, glazed, mounted Laminated, roller on two sides, 60cmx45cm
11	Chart showing sum of angles of quadrilateral is 360	Colourful, glazed, mounted on cloth, roller on two sides, 60cmx45cm
12	Chart showing congruence and similar properties of triangles	Colourful, glazed, Laminated, roller on two sides, 60cmx45cm
13	Geometrical instrument kit for teacher	Geometrical instruments kit for teachers. Containing articles (Compass, divider, protector ('D'), set square, foot rod & duster). plastic
14	Steel Scissors	Cutting edge 4" plastic/ steel.
15	Wooden Drawing Board	Dimensions 1m * ¾ m
16	Hanging squared Board	Black hanging rolling squared board with dimensions 54" * 54".
17	Physical Balance	200gm capacity (Kandi 200 gm)
18	Chart showing Unit Relation	Colourful, glazed, Laminated, roller on two sides, 60cmx45cm
19	Chart showing history and photographs of mathematicians	Colourful, glazed, Laminated, roller on two sides, 60cmx45cm
20	Hollow balls	Plastic, dia 3"
21	Solid Balls (glass)	1" diameter
22	Geo. Board	Rectangular 9"x9" Plastic

### **3. Items of Science Kit for Upper Primary schools**

#### **A. Physics**

<b>Item No.</b>	<b>Item</b>	<b>Description</b>
1.	Glass Prism	Size :1.50" x 1.50" x1.50"
2.	Convex Lens	Focal length 20cm , Dia 2"
3.	Concave Lens	F.L 20 cm ,Dia 2"
4.	Convex Mirror	F.L 20 cm Dia 2"
5.	Concave Mirror	F.L 20 cm Dia 2"
6.	Plane Mirror strip	4" x1"
7.	Lens stand	Wooden Standard size
8.	Mirror Holder	Wooden Standard size
9.	Magnetic Needle	On stand-complete
10.	Magnetic Compass	Dia 2" graduated
11.	Glass Rods	25 cm long ,dia 1cm , soda glass
12.	Ebonite Rods	25 cm long, dia 1cm
13.	Measuring Cylinder (100ml,500ml)	Graduated, Polypropylene 1 <sup>st</sup> grade
14.	Thermometer -10 to 110 <sup>o</sup>	Alcohol Red 1 <sup>o</sup> graduation
15.	Thermometer -10 to 110 <sup>o</sup>	Alcohol Red ½ <sup>o</sup> graduation
16.	Clinical Thermometer	(Doctor)
17.	Pendulum Bob steel	Dia 18mm with attached hook
18.	Torch Bulb	3.2V
19.	Connecting Wires	With cotton standard covered ,Copper,SWG 22
20.	Voltmeter DC	0-5 V, ABS plastic(class 2.5)
21.	Ammeter DC	0-5 Amp, ABS plastic(class 2.5)

22.	One way key	Al with yellow brass finish.
23.	Solar Cell	With L.E.D on base.
24.	Sand Paper	No. 120
25.	Kitchen Balance	2 kg
26.	Paper Pins	Packet of 100gms approx.
27.	Drawing Pins	Packet of 100 pins
28.	Boiling test tubes	(150X25mm) approx, Borosilicate glass
29.	Scissor	4 ½ " small (Plastic handle)
30.	Battery (Eliminator)	1Amp, (0-9 Volt) Step supply
31.	Periscope	Plastic, 3"x3" area of cross-section, 15" length
32.	Telescope	Plastic, foldable(approx 9" length)
33.	Electric Bell	On board complete demonstration
34.	Dynamo	AC/DC combined complete
35.	Volta Cell	Copper plate +Zn plate + (6"X4") PVC container
36.	Ring and Ball apparatus	¾ Brass ball Metallic & Brass ring
37.	Newton Disk (VIBGYOR)	150mm Disk dia on wooden bars.
38.	Pin hole camera.	Standard wooden (4"x1.5")
39.	Card Board Experiment for light	On Wood

## B. Chemistry

Item No.	Item	Description
1.	PH strips	(1 to 14) of pkt 100 leaves
2.	Red and Blue litmus paper	In card board 100 strip (60mX9m)
3.	Separating Funnel	100ml Standard cap with stop cork
4.	Filter Paper	Dia 4", 1pkt (papers)
5.	Beaker	50ml and 100 ml, polypropylene
6.	Funnels	75mm(3") Polypropylene
7.	Stoppers (Wooden for 15mm)	15mm wooden
8.	Test Tubes	Borosilicate
9.	Thistle Funnel	Borosilicate
10.	Conical Flask	Borosilicate 100ml with screen printed
11.	Wolff Bottle	With two 250ml capacity. Neck soda glass
12.	Tripod Stand	6"X3 ½ " Approx.
13.	Wire Gauge	5 ½" X 5 ½ " with Asbestos
14.	China dish	3" dia porcelain
15.	Test tube holder	Iron C.P
17.	Spirit Lamps	125ml capacity glass hexagonal
18.	Gas Jar	6"X2" Acrylic with cover
19.	Beehive Shelf	3" Dia Porcelain
20.	Trough	8"X4" Medium plastic superior.
21.	Iron Stand	6"X4" Ball and rod 18" approx, with clamp of Burret + Ring for funnel + Clamp for thermometer
22.	Stirrer	Soda Glass 200mmX6mm

23.	Cleaning brush for test tube	Nylon Bristol 200mm long 75mm Hair
24	Cork borer	Superior set of 3 (Brass)
25	Copper sulphate	L.R. Grade
26.	Plaster of Paris	L.R. Grade
30	Ball and Stick model of Hydrocarbons(methane)	Atomic model set Carbon & hydrogen balls & sticks

### C. Biology

S.No.	Name of the Item	Description
1.	Student Microscope	Eye piece-h10x & h15x Objectives-Acromatic 10x & 45x with safe packing /Thermocol
2.	Model of Human Eye	Only 4" Dia app Fiber glass
3.	Stethoscope	Dual
4.	Model life cycle of silk worm	12"X18"
5.	Model life of honey bee	12"X18"
6.	Model Digestive system	9"X21"
7.	Model Respiratory system	10"X14"
8.	Model blood circulation	9"X21"
9.	Model excretory system	10"X14"
10.	Model reproductory system Male	12"X14"
11.	Model reproductory system Female	12"X14"
12.	Ganong's photometer	20cm graduated 11" length on B/c stand.
	<b><u>Permanent Slides with slide box one each</u></b>	
13.	Amoeba	3"X1" slide
14.	Paramecium	3"X1" slide
15.	Volvox	3"X1" slide
16.	Plant Cell	3"X1" slide
17.	Animal Cell	3"X1" slide
18.	Blood Cell-RBC, WBC, Platelets	3"X1" slide
19.	Slide	3"X1" plain
20.	Dropper	4" long
21.	Glycerine	100ml