

S. No	Name of TLM	Age Group	Concept	Activities	Quantity	Remarks
1.	Bird in cage	All	Persistence of vision.	Students put the bird in cage by moving the gadget and observe the bird in cage which is on the other side.	One	
2.	Hygrometer	All	Humidity around.	Students can read the humidity in air by reading the meter scale.	One	
3.	Planck's law	Secondary classes	Heat absorption by different color.	By touching the plate's students feel the difference in heat absorbed by the plates with colors.	One	
4.	Newton Disc	Middle school	Seven colors (VIBGYOR) make white when mixed properly.	Students will move the disc with seven colors and observe the change in the color of disc which appears white.	One	
5.	Musical instruments	Secondary classes	Rods of different length with different frequency emit musical notes.	Children strike the pipes, one by one and get the sound of musical notes.	One	
6.	Pulley System	Secondary and senior secondary	Pulley concept	Student can lift the body by using pulley concept/method.	One	
7.	See- Saw	Secondary and senior secondary	Balance of force	Children enjoy playing and learn the concept of balance and related force.	One	
8.	Rain gauge	Secondary and senior secondary	Measuring rain fall in centimeters	Students can measure rain fall on a particular day	One	

9.	World time map	Secondary and senior secondary	Measurement of time	Students can observe time and study the cause of variation in time at various places.	One	
10	Wave motion	Secondary and senior secondary	Observe the movement of wave when there is disturbance.	Students move the handle and observe the wave moving in a particular pattern.	One	
11.	DNA Model	Senior secondary	DNA model (Double helix) given by Watson and crick.	Students will understand the arrangement of various bases AGCT and their arrangement	One	
12.	Wheel and axle	Middle school	Concept of wheel and axle as combination of simple machines.	Students rotate the wheel and observe the linked chains also moving	One	
13.	Momentum	Secondary Schools	Impact on speed with shifting of load to the center.	Students move the load and study the impact on speed of the movement in a circle.	One	
14.	Parabolic shift	Secondary and senior secondary	Effect on the throw with the change in angle of the object thrown.	Students generally use canvas ball to see the throw by dropping the ball from the top.	One	
15.	Three mirror with convex concave and plain surfaces.	Middle school	Students understand the image formation due to change in surface.	Students compare the images formed and learn the surface impact on images being small or big.	One	
16.	Modern Periodic Table	Secondary and senior secondary	Concept of classification of elements	Students will understand the significance of classification and the properties of groups and periods.	One	

## SCIENCE PARK



1. Bird in cage



2. Hygrometer



3. Planck's Law



4. Newton's color Disc



5. Musical Instruments



6. Pulley System



7. See-Saw



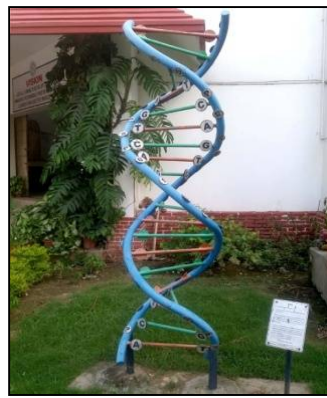
8. Rain Gauge



9. World Time map



10. Wave motion



11. DNA Model



12. Wheel and Axle



13. Momentum



14. Parabolic Shift



15. Three Mirrors



16. Modern Periodic Table



**JB Academy, Faizabad**  
**Teaching Learning Models of Science**  
**( Arvind Gupta Laboratory)**

16.7.2018

S. No	Name of TLM	Age Group	Concept	Activities	Quantity	Remarks
1.	Dancing Doll	Middle school	Principle of wind mill.	Student will make the doll dance and understand the principle.	<b>15</b>	
2.	Acrobat	Middle school	Centrifugal force	When the toy is spun the arms and legs of the acrobat fly in air to demonstrate centrifugal force.	<b>15</b>	
3.	Bird in cage	Middle school	Persistence of vision	Students put the bird in cage by moving the gadget and observe the bird in cage which is on the other side.	<b>04</b>	
4.	Pullback car	Middle school	Conservation of energy	On the storage of energy car moves forward and children learn the principle of conservation of energy.	<b>03</b>	

**ARVIND GUPTA LAB**



**1. Dancing Doll**



**2. Acrobat**



**3. Bird in Cage**



**4. Pullback Car**

**JB Academy, Faizabad**  
**Teaching Learning Models of Maths**

S. No	Name of TLM	Age Group	Concept	Activities	Quantity	Remarks
1.	Solid Shapes	CL VI to X	To verify number of vertices, edges and faces Of the solid.	Students can easily count the vertices, edges and faces of the solid	One of each shape and size.	
2.	Pythagoras Theorem Stand	CI VI to X	To verify the statement of Pythagoras Theorem	By using this students can verify the Pythagorean Triplets	One	
3.	Geometry BOX (Big)	CI VI to X	Measurement of angles and line segments, parallel Lines and its properties.	Question of geometrical constructions can be drawn on green board with accuracy.	One	
4.	Circular Discs	CI VIII to X	To verify the value of $\pi$	While calculating area of circle, surface area and volume of cylinder, cone and sphere	One	
5.	Arc Disc	CI X	To verify the theorems of Circle	Angle subtended by an arc at centre and its properties	Three	
6.	Octant	CI XI and XII	coordinate system of 3-dimensional geometry	To find the place coordinate of point in 3-D system	One	
7.	Conic Section	CI XI and XII	Parabola ellipse and hyperbola	Major, minor axis and eccentricity of conics.	Two	
8.	Trigonometric allied angles	CI XI and XII	To find numerical values of small angles	Find the value of $\sin(1410^\circ)$ and $\cos(120^\circ)$ etc.	One	

9.	calipers	CI VI to VIII	2-D figure of square,parallelogram,rhombus etc	Verification of properties of square,parallelogram,rhombus etc	Five	
10.	Geometrical solid shapes	CI VI to VIII	Cylinder cone and Sphere etc	To find volume, surface area of solid shapes	One	



1. Solid Shapes



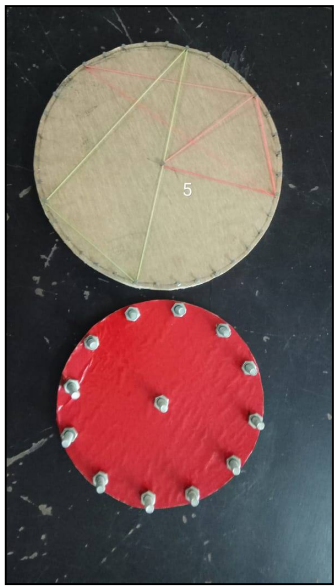
2. Pythagoras Theorem Stand



3. Geometry BOX (Big)



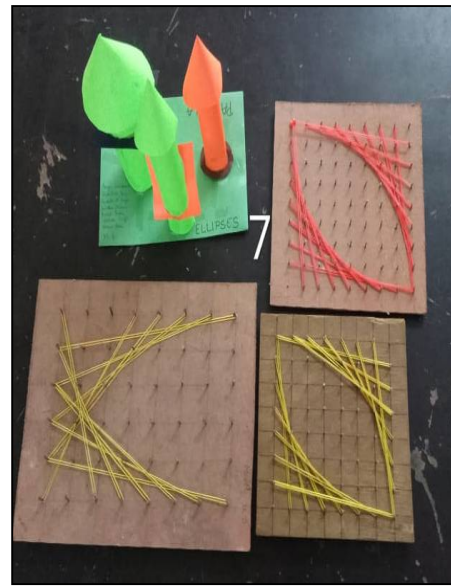
4. Circular Discs



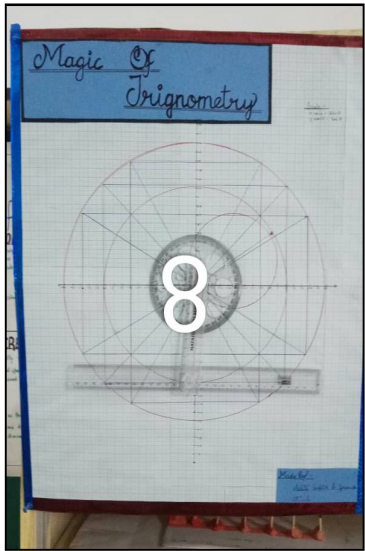
5. Arc Disc



6. Octant



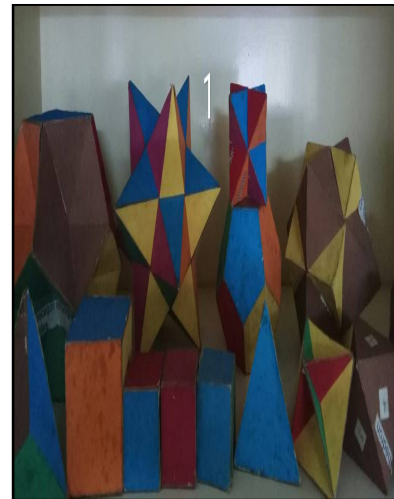
7. Conic Section



8. Trigonometric Allied Angles



9. Calipers



10. Geometrical solid shapes