

**YEAR PLAN 2018 – 2019**  
**Grade VI PHYSICS**

The academic year is divided into **two** sessions

**Session One:** June 2018 to October 2018

**Session Two:** November 2018 to March 2019

**Continuous assessments:** June, July, August, September, November, December, January, February

**Summative Assessment I:** October 2018

**Summative Assessment II:** March 2019

Please check the **index page** in the notebooks for Continuous Assessment marks.

**ENDURING UNDERSTANDING:** To understand and appreciate how things work.

**OBJECTIVES:**

**To**

- ❖ acquire knowledge and understanding of terms, facts, concepts, definitions, laws, principles and processes of Physics.
- ❖ develop skills in practical aspects of handling apparatus, recording observations and in drawing diagrams.
- ❖ be able to read data and draw conclusions and solve problems.
- ❖ discover that there is a living and growing physics relevant to the modern age in which we live.

**Project:**

**SA I:** To make any measuring instrument.

**SA II:** To make a pinhole camera.

**Session One: June 2018 to October 2018**

<b>Duration</b>	<b>Topic</b>	<b>Specific learning objectives</b>	<b>Activities</b>
June	Physical quantities and measurement-1	<ul style="list-style-type: none"> <li>• Understands the need of standard units.</li> <li>• Explains concepts of length as a distance between two points using objects in classroom like book, table, blackboard, length of classroom, etc.</li> <li>• Explains the correct method of measurement using a ruler and a measuring tape.</li> <li>• Measures mass using a beam balance and electronic balance.</li> <li>• Explains different units of length and mass.</li> <li>• Practices how to convert one unit into others.</li> <li>• Determines of area of regular and irregular shapes.</li> </ul>	Measures the length of different objects and that of the given curve. Measures the mass of different objects using beam balance and electronic balance. Measures the area of an irregular leaf with a graph paper.
July	Physical quantities and measurement-2	<ul style="list-style-type: none"> <li>• Learns to measure time and temperature.</li> <li>• Solves numerical problems.</li> </ul>	Measures time using stop clock and temperature using thermometer.
Mid - August	Force	<ul style="list-style-type: none"> <li>• Recalls the effects of force and types of force.</li> <li>• Understands the concept of friction and types of friction.</li> <li>• Classifies advantages and disadvantages of friction.</li> </ul>	Categorize different forces into contact forces and forces at a distance. Compares friction between different surfaces. Uses a spring balance to observe the difference between rolling friction and sliding friction.
Mid-September	Revision		
October		Summative assessment-1	

**Session Two: November 2018 to March 2019**

<b>Duration</b>	<b>Topic</b>	<b>Specific learning objective</b>	<b>Activities</b>
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November	Simple machines	<ul style="list-style-type: none"> <li>Understands the terms related with machines, the different types of machines and kinds of levers.</li> <li>Explains the care and maintenance of machines.</li> </ul>	<p>Identify and classify the various objects used in daily life as different types of simple machines.</p> <p>Collect information and pictures to make a chart on simple machines and their applications or design a simple machine.</p> <p>Draw diagrams to show the arrangement of load, effort, and fulcrum for each of the different types of lever.</p>
December	Light	<ul style="list-style-type: none"> <li>Understands the concept of rectilinear propagation of light using a pinhole camera</li> <li>Distinguishes between transparent, translucent and opaque objects.</li> <li>Understands the formation of shadows.</li> </ul>	<p>Demonstrate the property of rectilinear propagation of light.</p> <p>Construct a pinhole camera.</p>
January -	Magnetism	<ul style="list-style-type: none"> <li>Recalls natural and artificial magnets, magnetic and non- magnetic substances.</li> <li>Understands the properties of magnets, types of magnets, magnetic field around a bar magnet, magnetisation, uses of magnets and electromagnets, methods to demagnetise a magnet and Earth's magnetic field.</li> <li>Classifies objects as magnetic and non-magnetic.</li> <li>Understands that like poles of a magnet repel each other and unlike poles attract.</li> </ul>	<p>Construct an electromagnet using an iron nail, copper wire and an electric cell. The assignment should include diagram, aim, procedure and materials required.</p> <p>Demonstrate that freely suspended magnet always aligns itself in a particular direction.</p>
February	Revision		
March		Summative assessment-2	
<p><i>Facilitator's name: Mrs. Chinnamma George ;Mrs. Renjini Sanjay; Mrs.Rekha S.</i></p> <p><i>Textbook: Frank New Certificate Physics Grade VI</i></p> <p><i>Resources: New oxford Modern science Physics by John West.</i></p>			