

YEAR PLAN 2018 - 2019**Grade VII 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.

General objectives: To

- become successful learners who enjoy learning.
- understand texts of different subjects so as to communicate knowledge and ideas in ways specific to the subject.
- articulate thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts.
- use technology to access and provide information and to communicate with others.
- understand cross-curricular linkages- connect learning across subject areas.
- become confident individuals who are able to live safe, healthy and fulfilling lives.
- become responsible citizens who make a positive contribution to society.
- understand and apply core concepts and knowledge from various subjects to real life experiences.
- exhibit sensitivity towards environmental issues; learn to manage and utilize resources judiciously.

Project:

SA1-To make a simple pendulum and measure its time period.

SA2-To make any musical instrument.

Session One – JUNE 2018 TO OCTOBER 2018

Duration	Topic	Specific Objectives	Activities
June	Physical Quantities and Measurement	<ul style="list-style-type: none"> • Defines volume, area, density and speed. • Recalls SI units of the above quantities and their measurement. • Compares the relationship between the CGS and SI units of density. • Solves simple numerical problems. 	Determine the density of a rectangular block and an irregular solid.
July	Motion	<ul style="list-style-type: none"> • Recalls the concept of rest and motion. • Compares the different types of motion. • Understands the concept of distance, speed and their SI units. • Solves numerical problems. • Differentiates mass and weight. 	To make a list of objects in different types of motion.
August	Light	<ul style="list-style-type: none"> • Understands the concept of incident ray, reflected ray, angle of incidence, angle of reflection, normal at the point of incidence. • Understands the laws of reflection. • Learns to draw the image formed by a plane mirror. • Understands the concepts of primary colours and secondary colours and colour of an object. 	Experiment to show images formed by a plane mirror. Draw the ray diagrams to show the formation of images by a plane mirror. Explain the colour of an object and its reason by showing a video.

September -	Heat	<ul style="list-style-type: none"> • Distinguishes between heat and temperature and their SI units. • Recalls the effects of heat: change in temperature, change of state. • Compares the temperature scales: Celsius, Fahrenheit and Kelvin. • Applies the effect of thermal expansion. • Understands the methods of transfer of heat. 	<p>Demonstrate the transfer of heat by conduction, convection and radiation.</p> <p>Explain the working of a thermos flask.</p>
October	Revision	Summative Assessment-I	
Session Two – November 2018 to March 2019			
November	Sound	<ul style="list-style-type: none"> • Understands production of sound and its travel in media. • Defines the characteristics of sound. • Recalls terms related to a wave. • Solves numerical problems based on reflection of sound-echo. 	<p>Demonstration of production of sound using simple objects within the classroom followed by discussion.</p> <p>Children place their hand on their throats and when they speak they feel vibration.</p>
December	Electricity	<ul style="list-style-type: none"> • Recalls the different sources of electricity. • Understands simple electric circuit-series and parallel. • Classifies conductors and insulators. 	Draw simple electric circuits and make them.
January-	Magnetism	<p>Understands</p> <ul style="list-style-type: none"> • the properties of magnet. • electromagnet and its application. • electromagnetic induction. 	<p>Demonstrate the law of electromagnetism.</p> <p>Explain the working of an electric bell.</p>
February	Revision		
March		Summative Assessment –II	
<p>Facilitator's names: Mrs. Chinnamma George and Mrs. Rekha S.</p> <p>Textbook: Frank New Certificate Physics-Class 7</p> <p>Resources: Websites- physicsclassroom.com, khanacademy.org, New living science physics.</p>			