YEAR 12 A/ B –PHYSICS

WEEK 10 (1st November to 5th November) (1 lesson only) Thursday GL PASS exam

Work sent to the students through: Google classroom / Zoom Learning Platform

Topic: Electrical quantities

Resources: Student text book, worksheet file, interactive power point from Board works and Online animations

Date	Class	Lesson	Lesson objectives & Learning outcomes	Mode of teaching	
1st Nov Sunday **3rd Nov** **Tuesday**	**12 A** **12 B**	8 6	**Learning objectives:** Differentiate between ohmic and non-ohmic conductors **Learning Outcomes :** Use Ohm's law V = I R Realise that the resistance of a component is a measure of its opposition to the flow of charge through it. Realise that resistance remains constant only if temperature is constant. **Draw and interpret VI graphs for metal wire, filament lamp, semiconductors.** Discussion on filament lamp, heater coils as non ohmic conductors.	**ZOOM**	Teacher uses power point presentation and breakout sessions for students to collaborate and attain the objectives.

YEAR 12 A/ B – PHYSICS

WEEK 10 - (1st Nov to 5th Nov) - 3 lessons for both batches

Work sent to the students through: Whatsapp group / Google classroom / Zoom Learning Platform

Topic: 2.17 Resolving vectors
2.18 Projectiles

Resources: Student text book, worksheet file, interactive power point from Board works and Online animations

Date & Class	Lesson	Lesson objectives & Learning outcomes	Mode of teaching	
4th Nov Wednesday **- 12 B** 2nd Nov Monday **- 12 A**	3 1	**Learning Objective:** (ASSESSMENT) Apply the knowledge and understanding of the concepts of motion graphs, kinematics equations and resolving vectors to answer the questions in the assessment. **Learning Outcome:** Students will be able to recall the concepts learned and apply their knowledge and understanding to answer the questions, in the assessment.	**Zoom**	Teacher will conduct the assessment with multiple choice and structured questions through Google forms and monitor the students on Zoom
1st Nov Sunday **- 12 B** 2nd Nov Monday **- 12 A**	6 2	**L.O -** Resolve a vector into two components at right angles to each other by drawing and by calculation **Learning outcomes-** • Resolve a vector such as displacement, velocity and force into two perpendicular components. • Use of scale drawing **or resolved forces** to solve problems. • Identify the need to consider components	**GC**	Worksheet posted in GC. Students should be able to solve problems by constructing an appropriate scale

		of vectors like velocity, force etc. • Calculate the values of the component vectors.		drawing and calculate the resultant of two or more vectors
1st Nov Sunday **- 12 B** 3rd Nov Tuesday **- 12 A**	7 4	**L.O –** Understand how to make use of the independence of vertical and horizontal motion of a projectile moving freely under gravity **Learning outcomes-** • Recognise the independent effect of motion in horizontal and vertical directions. • Identify vertical and horizontal components of initial velocity at an angle. • Understand how the vertical and horizontal components are varying as a body is projected horizontally • Apply the kinematics equations to objects projected horizontally.	**Zoom**	Teacher uses power point presentation and board works that contains interactive questions and online simulation to discuss the independence of vertical and horizontal motion of a projectile moving freely under gravity

YEAR 13 A/ B –PHYSICS

WEEK 10 (1st November to 5th November)

Work sent to the students through: Google classroom / Zoom Learning Platform

Topic: Thermodynamics

Date	Class	Lesson	Lesson objectives & Learning outcome	Mode of teaching	
2nd Nov Monday	**13 A** **13 B**	1 6	**Learning objectives**: Describe and explain kinetic theory of gases. **Learning Outcomes** : Derive and use the expression $\frac{1}{2} m\langle c^2\rangle = \frac{3}{2} kT$ Explain that the mean translational	**Zoom**	Teacher uses power point presentation and breakout sessions for students to collaborate and attain the

			kinetic energy of an atom of an ideal gas is directly proportional to the temperature of the gas in kelvin;		objectives.
2nd Nov Monday	**13 A** **13 B**	**2** **7**	**Learning objectives**: Describe and explain kinetic theory of gases. **Learning Outcomes** : Select and apply the equation E = 3/2 kT for the mean translational kinetic energy of atoms. Recognise and use the expression ½ m$<c^2>$ = 3/2 kT Draw and explain the Maxwell- Boltzmann distribution curve for different temperatures.	**zoom**	Teacher uses power point presentation and breakout sessions for students to collaborate and attain the objectives.
3rd Nov Tuesday **4th Nov** Wednesday	**13 A** **13 B**	4 3	**Learning objectives**: Derive kinetic theory equation for pressure using gas law. **Learning Outcomes** : Use the expression **$P = 1/3\ \rho c^2$** in numerical problems**.**	**Zoom**	Teacher gives the assessment in Google forms.