PHYSICS SCHEMES OF WORK

FORM TWO 2019

TERM I

REFERENCES:

1. Secondary Physics KLB
2. Comprehensive Secondary Physics
3. Principles of Physics
4. Golden Tips
5. Teacher's Book

WK	LSN	TOPIC	SUB-TOPIC	OBJECTIVES	L/ACTIVITIES	L/T AIDS	REFERENCE	REMARK
1	1-4	REPORTING AND REVISION OF LAST TERM'S EXAMS						
2	1-2	Magnetism	Magnetism and magnetic materials	By the end of the lesson, the learner should be able to: Identify magnetic and non-magnetic materials	Observing attraction and repulsion of magnets Identifying the test for magnetic materials Describing natural and artificial materials Carrying out experiments to identify magnetic and non-magnetic materials	Magnets Nails Pins Wood Plastics Tins Spoons Strings Razor blade Stand	Comprehensive secondary physics students book 2 pages 1-2 Comprehensive secondary physics teachers book 2 pages 1-5 Secondary physics KLB students book 2 page Principles of physics (M.Nelkom) pages 442-443 Golden tips physics page 124	
	3-4	Magnetism	Properties of magnets and the law of magnetism	By the end of the lesson, the learner should be able to Describe the properties of magnets State the logic law of magnetism	Investigating properties of magnets Stating the laws of magnetism	Magnets Charts on properties Iron fillings Strings Stand	Comprehensive secondary physics students book 2 pages 1-2 Comprehensive secondary physics teachers book 2 pages 1-5 Secondary physics KLB students book 2 page 1-4 Principles of physics (M.Nelkom) pages 149 Golden tips physics page 124	
3	1-2	Magnetism	The compass	By the end of the lesson, the learner should be able to Construct simple compass	Constructing a simple compass	Pin/screw Magnet Cork Glass top Water trough Piece of stiff paper Razor blade Glue	Comprehensive secondary physics students book 2 pages 3-5 Comprehensive secondary physics teachers book 2 pages 1-5 Secondary physics KLB students book 2 page 5 Principles of physics (M.Nelkom) pages 151 Golden tips physics page 127	
	3-4	Magnetism	Magnetic field patterns	By the end of the lesson, the learner should be able to: Describe magnet field patterns	Plotting the field of a bar magnet using a compass and iron filings	A compass Iron fillings Bar magnets Can with lid	Comprehensive secondary physics students book 2 pages 3-5 Comprehensive secondary physics teachers book 2 pages	

						Card board Sheet of papers	1-5 Secondary physics KLB students book 2 page 6-7 Principles of physics (M.Nelkom) pages 444 Golden tips physics page 124-125	
4	1-2	Magnetism	Making magnets by induction and stroking	By the end of the lesson, the learner should be able to make magnets by : Induction Stroking	Demonstrating induction Magnetizing a steel bar by stroking single and double strikes Defining hard and soft magnets	Bar magnets Steel bars Nails Iron bars	Comprehensive secondary physics students book 2 pages 6-7 Comprehensive secondary physics teachers book 2 pages 1-5 Secondary physics KLB students book 2 page 19-22 Principles of physics (M.Nelkom) pages 441-442 Golden tips physics page 125-126	
	3-4	Magnetism	Making magnets by an electric current	By the end of the lesson, the learner should be able to: Magnetize a material by an electric current	Magnetizing a steel bar by an electric current	Insulated wire Battery cell Steel bar	Comprehensive secondary physics students book 2 pages 8 Comprehensive secondary physics teachers book 2 pages 1-5 Secondary physics KLB students book 2 page 23-24 Principles of physics (M.Nelkom) pages 440 Golden tips physics page 125-126	
5	1-2	Magnetism	Demagnetization and caring for magnets	By the end of the lesson, the learner should be able to Describe the methods of demagnetizative Describe how to care for magnets	Describing ways of demagnetizing of magnet Explaining how to care for magnets Carrying out experiments to demagnetize and care for magnets	Battery/cell Keepers Bar magnets Chart on demagnetization and care for magnets	Comprehensive secondary physics students book 2 pages 8-9 Comprehensive secondary physics teachers book 2 pages 1-5 Secondary physics KLB students book 2 page 25-26 Principles of physics (M.Nelkom) pages 442	

							Golden tips physics page 126-127	
	3-4	Magnetism	Uses of magnets	By the end of the lesson, the learner should be able to Describe the uses of magnets	Describing uses of magnets Discussions Using magnets	Magnets Metallic bars Non-metallic bars	Comprehensive secondary physics students book 2 pages 9 Comprehensive secondary physics teachers book 2 pages 1-5 Secondary physics KLB students book 2 page 27 Principles of physics (M.Nelkom) pages Golden tips physics page 127	
6	1-2	Magnetism	The domain theory of magnetism	By the end of the lesson, the learner should be able to: Explain the domain theory	Describing the domain theory of magnetism Explaining the application of the domain theory of magnetism	Charts on domain theory Bar magnets Iron fillings Test tubes Cork	Comprehensive secondary physics students book 2 pages 9-10 Comprehensive secondary physics teachers book 2 pages 1-5 Secondary physics KLB students book 2 page 17 Principles of physics (M.Nelkom) pages Golden tips physics page 127	
	3-4	Magnetism	Revision	By the end of the lesson, the learner should be able to: Answer questions on magnetism	Questions and answers Read more on magnetism	Questions and project to the students book 2	Comprehensive secondary physics students book 2 pages 11-12 Comprehensive secondary physics teachers book 2 pages 5-6 Secondary physics KLB students book 2 page 27 Principles of physics (M.Nelkom) pages	

							Golden tips physics page 131	
7	1-2	Measurement Ii	The vernire calipers	By the end of the lesson, the learner should be able to Measure length using vernire calipers	Measuring length and diameter of various objects using a venire calipers	Vernire calipers Circular containers Nail needles	Comprehensive secondary physics students book 2 pages 13-15 Comprehensive secondary physics teachers book 2 pages 6-11 Secondary physics KLB students book 2 page 31-36 Principles of physics (M.Nelkom) pages Golden tips physics page 3-4	
	3-4	Measurement Ii	The micrometer Screw gauge	By the end of the lesson, the learner should be able to: Measure length using the micrometer screw gauge	Measuring small diameters and thickness using the screw gauge	Micrometer screw gauge Charts on how to read the scale of a screw gauge Wires paper	Comprehensive secondary physics students book 2 pages 15-17 Comprehensive secondary physics teachers book 2 pages 6-11 Secondary physics KLB students book 2 page 36-40 Principles of physics (M.Nelkom) pages Golden tips physics page 4-5	
8	1-2	Measurement Ii	Decimal places, significant figures and standard form	By the end of the lesson, the learner should be able to: State numbers in standard form, decimal places and significant figures	Working out problems in decimals Identifying the significant figures of a number Writing numbers in standard form		Comprehensive secondary physics students book 2 pages 17-19 Comprehensive secondary physics teachers book 2 pages 6-11 Secondary physics KLB students book 2 page 40-41 Principles of physics (M.Nelkom) pages	

							Golden tips physics page 8-9	
	3-4	Measurement Ii	Determining the size of a molecule	By the end of the lesson, the learner should be able to: Estimate the diameter of a drop of oil	Measuring the diameter of an molecule	Oil Burette Wire Trough Water Floor or pollen grain strings	Comprehensive secondary physics students book 2 pages 6-11 Comprehensive secondary physics teachers book 2 pages 19-21 Secondary physics KLB students book 2 page 42-44 Principles of physics (M.Nelkom) pages Golden tips physics page 9	
9	1-2	Measurement Ii	Revision	By the end of the lesson the learner should be able to: Answer questions involving measurement	Problem solving Identifying values on appropriate scale Carrying out a project work	Questions and project the students book 2 Questions work sheet	Comprehensive secondary physics students book 2 pages 21-23 Comprehensive secondary physics teachers book 2 pages 11 Secondary physics KLB students book 2 page 46-49 Principles of physics (M.Nelkom) pages Golden tips physics page 10	
	3-4	The Turning Effects Of A Force	The moments of a force	By the end of the lesson, the learner should be able to: Define moments of force about a point State the SI units of moment of force	Defining moments of force Calculating moment	Meter rule Knife edge Strings Spring balance Masses	Comprehensive secondary physics students book 2 pages 24 Comprehensive secondary physics teachers book 2 pages 12-14 Secondary physics KLB students book 2 page 50-52 Principles of physics	

							(M.Nelkom) pages Golden tips physics page 13	
10	1-2	The Turning Effects Of A Force	Principles of moments	By the end of the lesson, the learner should be able to: State and verify the principle of moment	Stating the principle of moment of a force Calculating moments	Meter rule Knife edge Strings Spring balance Masses	Comprehensive secondary physics students book 2 pages 24 Comprehensive secondary physics teachers book 2 pages 12-14 Secondary physics KLB students book 2 page 53-56 Principles of physics (M.Nelkom) pages Golden tips physics page 14-15	
	3-4	The Turning Effects Of A Force	Revision	By the end of the lesson, the learner should be able to Solve problems involving moments	Problems solving Discussion of correct procedure Questions and answers	The exercise in the student book	Comprehensive secondary physics students book 2 pages 27-28 Comprehensive secondary physics teachers book 2 pages 13-14 Secondary physics KLB students book 2 page 65-67 Principles of physics (M.Nelkom) pages Golden tips physics page 14-15	
11	1-2	Turning Effects Of A Force	Revision	By the end of the lesson, the learner should be able to: Answer questions on the covered topics	Answer questions in quiz or test form Discussing answers	Moderate a review questions Marking schemes	Comprehensive secondary physics students book 2 pages 1-28 Comprehensive secondary physics teachers book 2 pages 1-14 Secondary physics KLB students book 2 page 65-67 Principles of physics	

							(M.Nelkom) pages Golden tips physics page 14-15	
	3-4	Equilibrium And Centre Of Gravity	Equilibrium	By the end of the lesson, the learner should be able to: Identify and explain the states of equilibrium	Identifying the states of equilibrium Explaining the conditions of equilibrium	Objects with stable, unstable and neutral equilibrium	Comprehensive secondary physics students book 2 pages 33 Comprehensive secondary physics teachers book 2 pages 15-17 Secondary physics KLB students book 2 page 17-18 Principles of physics (M.Nelkom) pages Golden tips physics page 15-16	
12	1-2	Equilibrium And Centre Of Gravity	Centre of gravity	By the end of the lesson, the learner should be able to Define centre of gravity Determine centre of gravity of lamina objects	Defining centre of gravity Determining centre of gravity of lamina objects	Lamina objects Plumb line pencils	Comprehensive secondary physics students book 2 pages 30 Comprehensive secondary physics teachers book 2 pages 15-17 Secondary physics KLB students book 2 page 68-76 Principles of physics (M.Nelkom) pages Golden tips physics page 15	
	3-4	Equilibrium And Centre Of Gravity	Stability	By the end of the lesson, the learner should be able to: Explain and state the factors affecting stability of an object	Identifying the factors affecting stability Explaining how equilibrium is maintained	Chart showing factors of stability	Comprehensive secondary physics students book 2 pages 31-33 Comprehensive secondary physics teachers book 2 pages 15-17 Secondary physics KLB students book 2 page 78 Principles of physics	

							(M.Nelkom) pages Golden tips physics page 16	
13	1-2	Equilibrium And Centre Of Gravity	Stability	By the end of the lesson, the learner should be able to: Explain where stability is applicable	Explaining the application of stability Discussions	Pictures and charts showing applications of stability	Comprehensive secondary physics students book 2 pages 15-17 Comprehensive secondary physics teachers book 2 pages 33 Secondary physics KLB students book 2 page 79-80 Principles of physics (M.Nelkom) pages Golden tips physics page 16	
	3-4	Equilibrium And Centre Of Gravity	Revision	By the end of the lesson, the learner should be able to: Solve problems involving centre of gravity and moment of a force	Problem solving Discussion of solution Questions and answers Doing end of term examinations	Moderate review questions Marking schemes Exercises in the students book 2	Comprehensive secondary physics students book 2 pages 34 Comprehensive secondary physics teachers book 2 pages 17 Secondary physics KLB students book 2 page 80-82 Principles of physics (M.Nelkom) pages Golden tips physics page 16	
14		**END OF TERM EXERMINATIONS**						
15		**REPORT MAKING AND CLOSURE**						

PHYSICS SCHEMES OF WORK

FORM TWO

TERM II

REFERENCES:

1. Secondary Physics KLB
2. Comprehensive Secondary Physics
3. Principles of Physics
4. Golden Tips
5. Teacher's Book

WK	LSN	TOPIC	SUB-TOPIC	OBJECTIVES	L/ACTIVITIES	L/T AIDS	REFERENCE	REMARK
1	1-4	REPORTING AND REVISION OF LAST TERM'S EXAMS						
2	1-2	Reflection At Curved Surfaces	Spherical mirrors	By the end of the lesson, the learner should be able to: Describe concave, convex and parabolic reflectors	Reflecting light at curved mirrors	Concave mirrors Convex mirrors parabolic mirrors Plane papers Soft board, pins	Comprehensive secondary physics students book 2 pages 35 Comprehensive secondary physics teachers book 2 pages 18-22 Secondary physics KLB students book 2 page 83 Principles of physics (M.Nelkom) pages Golden tips physics page 102	
	3-4	Reflection At Curved Surfaces	Parts of spherical mirrors and parabolic surfaces	By the end of the lesson, the learner should be able to: Describe using any diagram, the principle axes, principle focus, centre of curvature, radius of curvature and related terms	Describing parts of a curved mirrors Observing reflection at spherical mirrors	Variety of a curved mirrors Graph papers Rulers	Comprehensive secondary physics students book 2 pages 35-37 Comprehensive secondary physics teachers book 2 pages 18-22 Secondary physics KLB students book 2 page 85-87 Principles of physics (M.Nelkom) pages Golden tips physics page 102	
3	1-2	Reflection At Curved Surfaces	Locating images in curved mirrors and parabolic surfaces	By the end of the lesson, the learner should be able to: Use ray diagram to locate images formed by plane mirrors	Drawing ray diagrams Describing image characteristics	Graph papers Soft boards Plane papers Pins	Comprehensive secondary physics students book 2 pages 37-38 Comprehensive secondary physics teachers book 2 pages 18-22 Secondary physics KLB students book 2 page 86 Principles of physics	

							(M.Nelkom) pages Golden tips physics page 103	
	3-4	Reflection At Curved Surfaces	Characteristics of images formed by concave mirrors	By the end of the lesson, the learner should be able to Determine experimentally the characteristics of images formed by concave mirrors	Experimenting with concave mirrors Describing the nature of images formed in concave mirror	Concave mirrors	Comprehensive secondary physics students book 2 pages 39-40 Comprehensive secondary physics teachers book 2 pages 19-22 Secondary physics KLB students book 2 page 95-100 Principles of physics (M.Nelkom) pages 439-440 Golden tips physics page 103	
4	1-2	Reflection At Curved Surfaces	Applications of curved reflecting surfaces and magnification	By the end of the lesson, the learner should be able to Define magnification State and explain the applications of curved mirrors State the defects of spherical mirrors	Explaining magnification and formula in curved mirrors Describing the uses of curved mirrors Asking questions	Curved mirrors Exercise in students book 2	Comprehensive secondary physics students book 2 pages 40-43 Comprehensive secondary physics teachers book 2 pages 19-24 Secondary physics KLB students book 2 page 104-120 Principles of physics (M.Nelkom) pages Golden tips physics page 105	
	3-4	The Magnetic Effect Of Electric Current	Magnetic field due to current	By the end of the lesson, the learner should be able to Perform and describe an experiment to determine the direction of a magnetic field round a current carrying conductor	Observing and describing the direction of magnetic field round a current carrying a conductor Carrying out experiments	Compass Wires Battery Ammeter Compass needle Cardboard Screws Iron fillings	Comprehensive secondary physics students book 2 pages 44-47 Comprehensive secondary physics teachers book 2 pages 25-28 Secondary physics KLB students book 2 page 123-128 Principles of physics	

							(M.Nelkom) pages 439-440 Golden tips physics page 128	
5	1-2	Magnetic Effect Of Electric Current	Magnetic field pattern	By the end of the lesson, the learner should be able to: Determining the magnetic field patterns on straight conductors and solenoid	Constructing a simple electromagnetic	Soft iron Nails Compass Solenoid	Comprehensive secondary physics students book 2 pages 47-48 Comprehensive secondary physics teachers book 2 pages 25-28 Secondary physics KLB students book 2 page 128 Principles of physics (M.Nelkom) pages 439-440 Golden tips physics page 129	
	3-4	Magnetic Field Of Electric Current	Electromagnetic field pattern	By the end of the lesson, the learner should be able to: Construct a simple electromagnet	Constructing a simple electromagnets	Solenoid Soft iron Nails compass	Comprehensive secondary physics students book 2 pages 47-48 Comprehensive secondary physics teachers book 2 pages 25-28 Secondary physics KLB students book 2 page 143 Principles of physics (M.Nelkom) pages 439-440 Golden tips physics page 130	
6	1-2	Magnetic Effects Of Electric Current	Strength of an electron-magnets	By the end of the lesson, the learner should be able to: Explain the working of simple electronic motor and an electric bell	Investigating the factors that affect the strength of an electromagnet	Battery Ammeter Different magnetic materials	Comprehensive secondary physics students book 2 pages 48-49 Comprehensive secondary physics teachers book 2 pages 25-28 Secondary physics KLB students book 2 page 131	

							Principles of physics (M.Nelkom) pages Golden tips physics page 130	
	3-4	Magnetic Effects Of Electric Current	Applications of electromagnets	By the end of the lesson, the learner should be able to: Explain the working of a simple electric motor and an electric bell	Discussing the use of an electric bell Discussing the use of electric motor	An electric bell An electric motor	Comprehensive secondary physics students book 2 pages 49-58 Comprehensive secondary physics teachers book 2 pages 23-28 Secondary physics KLB students book 2 page 143-151 Principles of physics (M.Nelkom) pages Golden tips physics page 130	
7	1-2	Magnetic Effects Of Electric Current	Construction of an electric bell	By the end of the lesson, the learner should be able to Construct a simple electric bell	Constructing an electric bell	Materials for constructing an electric bell Chart in electric bell	Comprehensive secondary physics students book 2 pages 48-49 Comprehensive secondary physics teachers book 2 pages 25-28 Secondary physics KLB students book 2 page 131 Principles of physics (M.Nelkom) pages Golden tips physics page 131	
	3-4	Magnetic Effects Of Electric Current	Motor effect	By the end of the lesson, the learner should be able to Experimentally determine direction of a force on a conductor carrying current in a magnetic field	Experiments on motor effects Flemings rules illustrated	Magnets Wires Battery Pins	Comprehensive secondary physics students book 2 pages 52-53 Comprehensive secondary physics teachers book 2 pages 25-28 Secondary physics KLB students book 2 page 150-151	

							Principles of physics (M.Nelkom) pages Golden tips physics page 130	
8	1-2	The Magnetic Effect Of Electric Current	Factors affecting force on a current carrying conductor	By the end of the lesson, the learner should be able to: State and explain factors affecting force on a current carrying conductors in a magnetic fields	Rotation between current magnetism and force	Battery Magnets Wires Ferromagnetic materials	Comprehensive secondary physics students book 2 pages 49-51 Comprehensive secondary physics teachers book 2 pages 27 Secondary physics KLB students book 2 page 131 Principles of physics (M.Nelkom) pages Golden tips physics page 130	
	3-4	The Magnetic Effect Of Electric Current	Construction of a simple electric motor	By the end of the lesson, the learner should be able to; Construct a simple electric motor	Constructing an electronic motor	Source of current Wire magnets	Comprehensive secondary physics students book 2 pages 49-51 Comprehensive secondary physics teachers book 2 pages 25-28 Secondary physics KLB students book 2 page 150-151 Principles of physics (M.Nelkom) pages Golden tips physics page 130	
9	1-2	The Magnetic Effect Of Electro-Current	Revision	By the end of the lesson, the learner should be able to Answer questions on magnetic effects of an electric current	Questions and answers Doing research/projects	Information and exercise in the students book 2	Comprehensive secondary physics students book 2 pages 58-59 Comprehensive secondary physics teachers book 2 pages 28-29 Secondary physics KLB	

							students book 2 page 152-153 Principles of physics (M.Nelkom) pages Golden tips physics page 131-132	
10	1-2	Hook's Law	Hook's law	By the end of the lesson, the learner should be able to: State and derive the Hook's law	Defining Hook's law Deriving Hook's law	Wire springs Masses Spring balance Graph paper	Comprehensive secondary physics students book 2 pages 60-61 Comprehensive secondary physics teachers book 2 pages 30-32 Secondary physics KLB students book 2 page 158 Principles of physics (M.Nelkom) pages 439-440 Golden tips physics page 17	
	3-4	Hook's Law	Spring constant	By the end of the lesson, the learner should be able to: Determine spring constant of a given spring	Determining the spring constant of a given spring Suspending masses of springs	Springs Meter rule Graph papers Masses	Comprehensive secondary physics students book 2 pages 61-63 Comprehensive secondary physics teachers book 2 pages 30-31 Secondary physics KLB students book 2 page 158-164 Principles of physics (M.Nelkom) pages Golden tips physics page 18	
11	1-2	Hook's Law	The spring balance	By the end of the lesson, the learner should be able to: Construct and calibrate a spring balance	Making and calibrating a spring balance	Wires Wood Meter rule Masses	Comprehensive secondary physics students book 2 pages 63-65 Comprehensive secondary physics teachers book 2 pages 30-32	

							Secondary physics KLB students book 2 page 165 Principles of physics (M.Nelkom) pages Golden tips physics page 18	
	3-4	Hook's Law	Revision	By the end of the lesson, the learner should be able to: Solve problems on Hook's law	Questions and answers Problem solving	Questions in the students book 2	Comprehensive secondary physics students book 2 pages 65-66 Comprehensive secondary physics teachers book 2 pages 32-33 Secondary physics KLB students book 2 page 166-169 Principles of physics (M.Nelkom) pages Golden tips physics page 19-20	
12	1-2	Waves I	Pulses and waves	By the end of the lesson, the learner should be able to Describe the information of pulses and waves	Describing the formation of pulses and waves	Strings/ropes Ripple frank Water Stones Basins	Comprehensive secondary physics students book 2 pages 67 Comprehensive secondary physics teachers book 2 pages 34-35 Secondary physics KLB students book 2 page 173-176 Principles of physics (M.Nelkom) pages Golden tips physics page 87	
	3-4	Waves I	Transverse and longitudinal pulse and waves	By the end of the lesson, the learner should be able to Describe transverse and longitudinal pulses and waves	Distinguishing between transverse and longitudinal pulses and waves Forming pulse and waves	Sources of transverse and longitudinal waves	Comprehensive secondary physics students book 2 pages 67-69 Comprehensive secondary physics teachers book 2 pages 34-35	

							Secondary physics KLB students book 2 page 170-173 Principles of physics (M.Nelkom) pages Golden tips physics page 87	
13	1-2	Waves I	Characteristics of waves	By the end of the lesson, the learner should be able to: Define amplitude (a), the wave length (l) the frequency (f) and the period (T) of a wave	Describing and defining the characteristics of waves	Ripple tank Rollers Springs Chart showing the characteristics of waves	Comprehensive secondary physics students book 2 pages 69-71 Comprehensive secondary physics teachers book 2 pages 34-35 Secondary physics KLB students book 2 page 174-183 Principles of physics (M.Nelkom) pages Golden tips physics page 89	
	3-4	Waves I	Revision	By the end of the lesson, the learner should be able to: Derive and solve problems using the formula v=fx	Deriving the equation v=fx Solving problems using the formula v=fx	Set questions	Comprehensive secondary physics students book 2 pages 70-71 Comprehensive secondary physics teachers book 2 pages 335 Secondary physics KLB students book 2 page 183 Principles of physics (M.Nelkom) pages Golden tips physics page 96	
14		**END OF TERM EXAMINATIONS**						
15		**REPORT MAKING AND CLOSURE**						

PHYSICS SCHEMES OF WORK

FORM TWO

TERM III

REFERENCES:

1. Secondary Physics KLB
2. Comprehensive Secondary Physics
3. Principles of Physics
4. Golden Tips
5. Teacher's Book

WK	LSN	TOPIC	SUB-TOPIC	OBJECTIVES	L/ACTIVITIES	L/T AIDS	REFERENCE	REMARK
1	1-4	REPORTING AND REVISION OF LAST TERM'S EXAMS						
2	1-2	Evaluation	Revision	By the end of the lesson, the learner should be able to: Get the correct responses to the holiday assignments	Discussions on correct answers to holiday assignment	Marking scheme for holiday assignment	Comprehensive secondary physics students book 2 pages 69-71 Comprehensive secondary physics teachers book 2 pages 34-35 Secondary physics KLB students book 2 page 183-185 Principles of physics (M.Nelkom) pages Golden tips physics page 89	
	3-4	Sounds	Production of sounds	By the end of the lesson, the learner should be able to: Demonstrate that sound is produced by vibrating objects	Producing sound by vibrating strings, tins and bottles	Strings Tins Bottles Stick Tuning forks Nails shakers	Comprehensive secondary physics students book 2 pages 73 Comprehensive secondary physics teachers book 2 pages 37-39 Secondary physics KLB students book 2 page 186-189 Principles of physics (M.Nelkom) pages Golden tips physics page 93	
3	1-2	Sounds	Propagation of sounds	By the end of the the lesson, the learner should be able to: Show that light does not travel in vacuum	Demonstrating that sound requires a materials random for perpetration	Bell jar Vacuum pump Electric bell	Comprehensive secondary physics students book 2 pages 74 Comprehensive secondary physics teachers book 2 pages 37-39 Secondary physics KLB students book 2 page 190-193 Principles of physics	

							(M.Nelkom) pages Golden tips physics page 94	
	3-4	Sounds	Nature of sound waves	By the end of the lesson, the learner should be able to: Describe the nature of sound waves	Describing and observing the characteristics of sound waves using the echo methods to find the speed of sound Discussions	Open tube Closed tube Strings bottles	Comprehensive secondary physics students book 2 pages 74-76 Comprehensive secondary physics teachers book 2 pages 37-39 Secondary physics KLB students book 2 page 194 Principles of physics (M.Nelkom) pages Golden tips physics page 93	
4	1-2	Sound	Speed of sound	By the end of the lesson, the learner should be able to: Determine the speed of sound in air by echo methods	Investigating the factors determining the speed of sound	Stop clock/watch Chart on procedure for formulating the speed of sound	Comprehensive secondary physics students book 2 pages 77-78 Comprehensive secondary physics teachers book 2 pages 37-39 Secondary physics KLB students book 2 page 190-193 Principles of physics (M.Nelkom) pages Golden tips physics page 95	
	3-4	Sound	Factors affecting the speed of sound	By the end of the lesson, the learner should be able to: State factors that affect the speed of sound	Discussing how different aspects of nature affects the speed of sound	Sources of sound Solid Water Air	Comprehensive secondary physics students book 2 pages 78-79 Comprehensive secondary physics teachers book 2 pages 38-39 Secondary physics KLB students book 2 page 193 Principles of physics	

							(M.Nelkom) pages Golden tips physics page 95	
5	1-4	Sound	Revision	By the end of the lesson, the learner should be able to: Solve problems involving sound	Questions and answers Carrying out projects	Exercise in the students book 2	Comprehensive secondary physics students book 2 pages 79-80 Comprehensive secondary physics teachers book 2 pages 39 Secondary physics KLB students book 2 page 198-203 Principles of physics (M.Nelkom) pages Golden tips physics page 96	
6	1-2	Fluid Flow	Structure and turbulent flow	By the end of the lesson, the learner should be able to Describe the streamline and turbulent flow	Discussions Observing and defining Streamline and turbulent flow	Water Pipes of varying diameter Sheet of paper	Comprehensive secondary physics students book 2 pages 81 Comprehensive secondary physics teachers book 2 pages 40-42 Secondary physics KLB students book 2 page 204-208 Principles of physics (M.Nelkom) pages Golden tips physics page 48	
	3-4	Fluid Flow	Equation of continuity	By the end of the lesson, the learner should be able to Derive the equation of continuity	Deriving the equation of continuity Discussions	pipes of varying diameter charts on equation of continuity	Comprehensive secondary physics students book 2 pages 82 Comprehensive secondary physics teachers book 2 pages 40-42 Secondary physics KLB students book 2 page 210-215	

							Principles of physics (M.Nelkom) pages Golden tips physics page 49	
7	1-2	Fluid Flow	Bernoulli's effect	By the end of the lesson, the learner should be able to Describe experiments to illustrate Benoullli's effect	Illustrating Bernoulli's effect by experiments	Paper funnel Plane paper	Comprehensive secondary physics students book 2 pages 83-84 Comprehensive secondary physics teachers book 2 pages 40-42 Secondary physics KLB students book 2 page 215-221 Principles of physics (M.Nelkom) pages Golden tips physics page 49	
	3-4	Fluid Flow	Application of Bernoulli's effect	By the end of the lesson, the learner should be able to: Describe where Bernoulli's effect is applied such as in the Bunsen burner, spray gun, carburetor, aerofoil and spinning ball	Describing the application of Bernoulli's principle	Bunsen burner	Comprehensive secondary physics students book 2 pages 84-87 Comprehensive secondary physics teachers book 2 pages 40-42 Secondary physics KLB students book 2 page 221-231 Principles of physics (M.Nelkom) pages Golden tips physics page 49-50	
8	1-4	Fluid Flow	Revision	By the end of the lesson the learner should be able to: Solve problems involving the equilibrium of continuity	Answering the questions Discussing answers to assignment	Exercise in the students' book 2 assignment	Comprehensive secondary physics students book 2 pages 88 Comprehensive secondary physics teachers book 2 pages 42 Secondary physics KLB students book 2 page 231-234	

							Principles of physics (M.Nelkom) pages Golden tips physics page 50	
9-10	**1-4**	**TOPICAL REVISION**						
11		**END YEAR EXAMINATIONS**						
11		**END YEAR EXAMINATIONS**						
12		**REPORT MAKING AND CLOSURE**						