

# **SCHEMES OF WORK 2021**

## **PHYSICS FORM 1**

### **TERM 1-3**

W K	LS N	TOPIC	SUB-TOPIC	OBJECTIVES	L/ACTIVITIES	L/T AIDS	REFERENCE	REMARK
1-2		<b>ADMISSION</b>						
3	1-2	Introduction To Physics	Physics as a science	By the end of the lesson, the learner should be able to Explain what the study of physics involves Relate physics to other subjects and to technology Identify career opportunities related to physics	Discussions of value and meaning of physics Drawing flow charts of the braches of physics Listing career opportunities related to physics	Chart on definition of physics Flow charts on branches of physics Chart on scientific method List of career related to physics	Comprehensive secondary physics Students Book 1 page 1-2 Teacher's Book 1 pages 1-3 Secondary Physics students Book 1 (KLB) pages 1-6	
	3	Introduction To Physics	Basic laboratory rules	By the end of the lesson, the learner should be able to State and explain the basic laboratory rules	Discussions Explanation of rules	Chart on standard laboratory rules Pictures showing dangers of not observing laboratory rules	Comprehensive secondary physics Students Book 1 page 1-2 Teacher's Book 1 pages 1-3 Secondary Physics students Book 1 (KLB) pages 6-7	
	4	Measurements	Measuring length, area volume and mass	By the end of the lesson, the learner should be able to: Define length, area, volume, mass and state their symbols and SI units	Conversions Measuring Experiment Counting Demonstrations	Meter rule Burette Pipette Measuring cylinder Weighing balance Rod Shadow	Comprehensive secondary physics Students Book 1 page 4-8 Teacher's Book 1 pages 4-6 Secondary Physics students Book 1 (KLB) pages 8,22,14,33 Golden tips physics pages 1-7 Principles of Physics(M.Nelkon) pages 4-9	
4	1-2	Measurements	Measuring instruments	By the end of the lesson, the learner should be able to: Use measuring instrument accurately Metre rule, tape measure, beam balance, stop clock, measuring cylinder, pipette and burette	Demonstrations Reading scales and correcting errors	Meter rule Pipettes Burettes Stop watches Tape measure Measuring cylinder, beam balance	Comprehensive secondary physics Students Book 1 page 6-7 Teacher's Book 1 pages 5-6 Secondary Physics students Book 1 (KLB) pages 10,28 Golden tips physics pages 2 Principles of Physics(M.Nelkon) pages 7-9	

	3	Measurements	Measuring density	By the end of the lesson, the learner should be able to: Determine and mentally explain the density of substances Work our density of mixtures Solve numerical problems involving density	Experiment Working out answers to problems	Measuring cylinder Mass weighing balance Density bottle	Comprehensive secondary physics Students Book 1 page 9-12 Teacher's Book 1 pages 4-6 Secondary Physics students Book 1 (KLB) pages 35-48 Golden tips physics pages 7,10		
	4	Measurements	Measuring Time	By the end of the lesson, the learner should be able to Determine experimentally, the measurement of time	Experiments with pendulum Timing events	Pendulum Clock Watch	Comprehensive secondary physics Students Book 1 page 12-15 Teacher's Book 1 pages 6 Secondary Physics students Book 1 (KLB) pages 46-47 Golden tips physics pages 8 Principles of Physics(M.Nelkon) pages 23		
5	1-2	<b>MID TERM EXAM</b>							
	3-4	<b>MID TERM BREAK</b>							
6	1-2	Forces	Types of forces	By the end of the lesson, the learner should be able to Define force and state its SI units Describe types of forces State the effects of force	Discussions Explaining Demonstrations Identifying effects of forces	Charts of force String Elastic material Magnets Water Greece Oil spring balance	Comprehensive secondary physics Students Book 1 page 61-19 Teacher's Book 1 pages 6-10 Secondary Physics students Book 1 (KLB) pages 49-68 Golden tips physics pages 11-12 Principles of Physics(M.Nelkon) pages 64-65		
	3	Forces	Surface tension	By the end of the lesson, the learner should be able to: Describe experiments to illustrate cohesion, adhesion and surface tension State the factors affecting surface tension, its consequence and importance	Discussions Demonstrations Explaining the effects of surface tensions	Funnel Water Wire loop Tap Soap/detergent	Comprehensive secondary physics Students Book 1 page 19-22 Teacher's Book 1 pages 6-10 Secondary Physics students Book 1 (KLB) pages 63-70 Golden tips physics pages 12		

	4	Forces	Mass and weight	By the end of the lesson, the learner should be able to: State and explain the relationship between mass and weight Define scalar and vector magnitude	Demonstrations Discussions Problems solving on mass and weight	Beam balance Spring balance Sponge Store Polythene	Comprehensive secondary physics Students Book 1 page 17-22 Teacher's Book 1 pages 6-10 Secondary Physics students Book 1 (KLB) pages 72-75 Golden tips physics pages 7 Principles of Physics(M.Nelkon) pages 40	
7	1-2	Forces	Measuring Force	By the end of the lesson, the learner should be able to: Measure weight using spring balance Solve numerical problems on numerical forces	Discussions Experiments	Spring balance Chart on vectors and scalars	Comprehensive secondary physics Students Book 1 page 17-18 Teacher's Book 1 pages 17-15	
	3	Forces	Pressure and force	By the end of the lesson, the learner should be able to: Define pressure and state its SI units Determine pressure exerted by solids	Discussions Demonstrations Problem solving	Block of wood Spring balance Meter rule	Comprehensive secondary physics Students Book 1 page 6-10 Teacher's Book 1 pages 6-10 Secondary Physics students Book 1 (KLB) pages 82-85 Golden tips physics pages 44 Principles of Physics(M.Nelkon) pages 119-121	
	4	Pressure	Pressure in liquids	By the end of the lesson, the learner should be able to Investigate experimentally the factors that affect pressure in liquids (Fluids) Derive the formula for calculating pressure in fluids State the principle of transmission of pressure in fluids	Demonstrations Working out problems Discussions Experiments	Communication tubes Tin with holes at different heights Waters	Comprehensive secondary physics Students Book 1 page 27-30 Teacher's Book 1 pages 12-15 Secondary Physics students Book 1 (KLB) pages 49-68 Golden tips physics pages 44-45 Principles of Physics(M.Nelkom) pages 121-124	

8	1-2	Pressure	Pressure in gases	By the end of the lesson, the learner should be able to Explain atmospheric pressure and its effects State and explain how pressure is transmitted in fluids	Demonstrations Explanation of pressure transmission in fluids discussions	Water/oil Syringe	Comprehensive secondary physics Students Book 1 page 25-26,30-32 Teacher's Book 1 pages 12-15 Secondary Physics students Book 1 (KLB) pages 115-116,93-100 Golden tips physics pages 45-46 Principles of Physics(M.Nelko) pages 124		
	3	Pressure	Ganges and siphons	By the end of the lesson, the learner should be able to Describe the working of siphon and pressure gauge	Discussions Explanations Questions and answers	Barometer Bourdon gauge Syringes	Comprehensive secondary physics Students Book 1 page 31-34 Teacher's Book 1 pages 13-15 Secondary Physics students Book 1 (KLB) pages 113,117 Golden tips physics pages 44-45 Principles of Physics(M.Nelko) pages 133		
	4	Pressure	Application of pressure in liquids and gases	By the end of the lesson, the learner should be able to Explain the working of a hydraulic, braking system of vehicle Explain the working of mercury and forties barometer, bicycle pump and pressure gauges	Explaining the application of pressure in liquids and gases Class discussion on the principles of pressure in liquids Experiments	Chart showing the working of a hydraulic braking system Model of hydraulic brake system Barometer Bicycle pump	Comprehensive secondary physics Students Book 1 page 30-39 Teacher's Book 1 pages 13-15 Secondary Physics students Book 1 (KLB) pages 96-112 Golden tips physics pages 46-47 Principles of Physics(M.Nelko) pages 124-132		
9		<b>END OF TERM EXAMS</b>							
10		<b>REPORTS MAKING AND CLOSURE</b>							

# PHYSICS SCHEMES OF WORK

## FORM ONE TERM II

2021

### REFERENCES:

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

W K	LS N	TOPIC	SUB-TOPIC	OBJECTIVES	L/ACTIVITIES	L/T AIDS	REFERENCE	REMARK	
1	1-4	<b>REPORTING AND REVISION OF LAST TERM'S EXAMS</b>							
2	1-2	Particulate Nature Of Matter	States of matter	By the end of the lesson, the learner should be able to show that matter is made of up tiny particles	Demonstration Discussions of kinetic theory	Beaker Crystals Solutes Solvent	Comprehensive secondary physics Students Book 1 page 42  Teacher's Book 1 pages 15-18  Secondary Physics students Book 1 (KLB) pages 124-128  Golden tips physics pages 68  Principles of Physics(M.Nelko) pages 142		
3		Particulate Nature Of Matter	The Brownian motion	By the end of the lesson, the learner should be able to: Give evidence that matter is made up of tiny particles Demonstrate the Brownian motion in liquids & gases Explain the arrangement of particles in matter Explain the state on matter in terms of particle movement	Experiments Observations Discussions	Chalk dust Transparent lid Pollen grains Lens Beaker Smoke cell Source of light	Comprehensive secondary physics  Students Book 1 page 43-48  Teacher's Book 1 pages 15-18  Secondary Physics students Book 1 (KLB) pages 127-130  Golden tips physics pages 68  Principles of Physics(M.Nelko) pages 148-150		
4		Particulate Nature Of Matter	Diffusion in liquid, gases and solids	By the end of the lesson, the learner should be able to Explain diffusion in gases/liquids and solids	Experiments Discussions	Promise gas Jars Potassium permanganate Solvent Hydrochloric acid Ammonia Glass tube cotton wool	Comprehensive secondary physics Students Book 1 page 46-49  Teacher's Book 1 pages 15-18  Secondary Physics students Book 1 (KLB) pages 132-136  Golden tips physics pages 69  Principles of Physics(M.Nelko) pages 146-147		

3	1-2	Particulate Nature Of Matter	Revision on Particulate nature of matter	By the end of the lesson, the learner should be able to: Answer questions in students Book 1	Discussion Demonstrations Asking questions Answering questions		Secondary Physics students Book 1 (KLB) pages 136-138 Golden tips physics pages 69-70 Principles of Physics(M.Nelko) pages 164 Past Papers
	3	Thermal Expansion	Expansion of solids	By the end of the lesson, the learner should be able to: Define temperature Describe the functionality of various thermometers Explain the expansion and contraction in solids Explain forces due to expansion and contraction	Experiments Demonstration Experiments	Meter rule Metal rods Materials that conduct or do not conduct heat Ball and ring apparatus Bar gauge	Comprehensive secondary physics Students Book 1 page 50-52 Teacher's Book 1 pages 18-21 Secondary Physics students Book 1 (KLB) pages 139-144 Golden tips physics pages 70-72 Principles of Physics(M.Nelko) pages 168,175-176
	4	Thermal Expansion	Applications of expansion in solids	By the end of the lesson, the learner should be able to: Explain the application of expansion and contraction	Demonstrations Discussions Experiments	Charts on the application of expansion Rivets Bimetallic strips	Comprehensive secondary physics Students Book 1 page 52-54 Teacher's Book 1 pages 18-21 Secondary Physics students Book 1 (KLB) pages 145,151-153 Golden tips physics pages 73 Principles of Physics(M.Nelko) pages 177-179
4	1-2	Thermal Expansion	Expansion and contraction of liquid and gases	By the end of the lesson, the learner should be able to: Explain the expansion of liquid Describe the anomalous expansion of water and its effect	Discussions Experiments Demonstrations	Water Spirit Alcohol thermometer	Comprehensive secondary physics Students Book 1 page 54-56 Teacher's Book 1 pages 18-21 Secondary Physics students Book 1 (KLB) pages 149-155 Golden tips physics pages 72-73 Principles of Physics(M.Nelko) pages 182

	3	Thermal Expansion	Thermometers	By the end of the lesson, the learner should be able to: Explain the functioning of various thermometers Describe the functioning of various thermometers	Demonstrations Discussions	Liquid in glass thermometers Clinical thermometers Maximum and minimum thermometers	Comprehensive secondary physics Students Book 1 page 56-59 Teacher's Book 1 pages 18-21 Secondary Physics students Book 1 (KLB) pages 155-161 Golden tips physics pages 70-72 Principles of Physics(M.Nelko) pages 168-173	
	4	Thermal Expansion	Molecules and heat	By the end of the lesson, the learner should be able to Explain the effect of heat on the molecules of solid, liquid and gases	Discussions Experiments Demonstrations	Solids Liquids Air Source of heat Containers	Comprehensive secondary physics Students Book 1 page 60-61 Teacher's Book 1 pages 18-21 Secondary Physics students Book 1 (KLB) pages 139-162	
5	1-2	Thermal Expansion	Revision on thermal expansion	By the end of the lesson, the learner should be able to: Answer questions involving thermal expansions	Questions answers	Set questions	Comprehensive secondary physics Students Book 1 page 61-62 Teacher's Book 1 pages 21 Secondary Physics students Book 1 (KLB) pages 161-162 Golden tips physics pages 85-86 Principles of Physics(M.Nelko) pages 185	
	3	Heat Transfer	Heat and temperature	By the end of the lesson, the learner should be able to define heat State the difference between heat and temperature	Definitions Discussions Experiments	Materials that conduct heat and materials that do not conduct heat	Comprehensive secondary physics Students Book 1 page 63 Teacher's Book 1 pages 22-24 Secondary Physics students Book 1 (KLB) pages 163 Golden tips physics pages 774 Principles of Physics(M.Nelko) pages 168	

	4	Heat Transfer	Conduction of heat	By the end of the lesson, the learner should be able to: State and explain modes of heat transfer Explain factors affecting conduction		Metal rods Source of heat Test tube Water Ice in gauge	Comprehensive secondary physics Students Book 1 page 63-67 Teacher's Book 1 pages 22-24 Secondary Physics students Book 1 (KLB) pages 163-186 Golden tips physics pages 74-77 Principles of Physics(M.Nelko) pages 234-242	
6	1-2	Heat Transfer	Convection	By the end of the lesson, the learner should be able to Demonstrate convection in liquids Explain the working of hot water systems, car engine, cooling system and land sea breeze Explain the molecular application of convection in fluids	Experiments Discussion	Water Potassium permanganate Source of heat Smoke cell apparatus Chart on hot water system Car engine	Comprehensive secondary physics Students Book 1 page 67-69 Teacher's Book 1 pages 23 Secondary Physics students Book 1 (KLB) pages 177-188 Principles of Physics(M.Nelko) pages 238-2433	
	3	Heat Transfer	Radiation	By the end of the lesson, the learner should be able to Compare absorption and emission of radiant heat Explain the working of solar concentrators, heat taps and solar heaters Explain the working of a thermos flask		Experiments Making comparisons Discussions Explanations	Comprehensive secondary physics Students Book 1 page 70-74 Teacher's Book 1 pages 18-24 Secondary Physics students Book 1 (KLB) pages 187-195 Golden tips physics pages 75 Principles of Physics(M.Nelko) pages 246	
	4		REVISION	By the end of the lesson, the learner should be able to Answer questions on heat transfer	Questions Answers	Set questions		

7	1-2	Recti-Linear Propagation And Reflection Of Light On Plane Surfaces	Propagation of light	By the end of the lesson, the learner should be able to: Define opaque, translucent and transparent objects Describe the types of beams Perform and describe experiments to show rectilinear propagation of light	Discussions Experiments Descriptions Explanations	Opaque objects Glass Greased paper Card board Source of light Screens	Comprehensive secondary physics Students Book 1 page 76-77 Teacher's Book 1 pages 25-27 Secondary Physics students Book 1 (KLB) pages 199-204 Golden tips physics pages 75 Principles of Physics(M.Nelko) pages 251-252
	3	Recti-Linear Propagation And Reflection Of Light On Plane Surfaces	The pin-hole camera	By the end of the lesson, the learner should be able to: Explain the functions and principles involved in working of a pin-hole camera	Experiments Drawing Discussion	Pin hole camera Source of light (candle)	Comprehensive secondary physics Students Book 1 page 77 Teacher's Book 1 pages 25-27 Secondary Physics students Book 1 (KLB) pages 211-219 Golden tips physics pages 99 Principles of Physics(M.Nelko) pages 252-255
	4	Recti-Linear Propagation And Reflection Of Light On Plane Surfaces	Shadows	By the end of the lesson, the learner should be able to: Describe the formation of shadows Describe the solar and linear eclipses	Experiments Discussions Demonstrations Explanations Descriptions	Opaque objects Chart of the eclipse of earth and moon Source of light Screen	Comprehensive secondary physics Students Book 1 page 78-79 Teacher's Book 1 pages 25-27 Secondary Physics students Book 1 (KLB) pages 203-219 Principles of Physics(M.Nelko) pages 254-257

8	1-2	Recti-Linear Propagation And Reflection Of Light On Plane Surfaces	Reflection of light on plane surfaces	By the end of the lesson, the learner should be able to: Verify experimentally the law of reflection	Experiments Descriptions Explanations Discussions	Plane mirrors Pins White sheets of paper Soft boards	Comprehensive secondary physics Students Book 1 page 80-82 Teacher's Book 1 pages 25-27 Secondary Physics students Book 1 (KLB) pages 222-228 Golden tips physics pages 100 Principles of Physics(M.Nelko) pages 260	
	3	Recti-Linear Propagation And Reflection Of Light On Plane Surfaces	Image formation	By the end of the lesson, the learner should be able to: <i>© Education Plus Agencies</i>  Locate images in plane mirrors and state their characteristics	Experiments Descriptions Discussions	Pins Boards Protractor Mirror	Comprehensive secondary physics Students Book 1 page 83-84 Teacher's Book 1 pages 25-27 Secondary Physics students Book 1 (KLB) pages 228-230 Golden tips physics pages 100-101 Principles of Physics(M.Nelko) pages 264	
	4	Recti-Linear Propagation And Reflection Of Light On Plane Surfaces	The application of plane mirrors	By the end of the lesson, the learner should be able to: Explain the reflection of light on plane surfaces at an angle Explain the working of a periscope and kaleidoscope	Experiments Explanations Descriptions Discussions	Plane mirrors Objects such as candles Pipe Card board	Comprehensive secondary physics Students Book 1 page 84-86 Teacher's Book 1 pages 25-27 Secondary Physics students Book 1 (KLB) pages 235-240 Golden tips physics pages 101	
9	<b>END OF TERM EXAMINATIONS</b>							
10	<b>REPORTS MAKING AND CLOSURE</b>							

**PHYSICS SCHEMES OF WORK**  
**FORM ONE 2021**  
**TERM III**

**REFERENCES:**

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

W K	LS N	TOPIC	SUB-TOPIC	OBJECTIVES	L/ACTIVITIES	L/T AIDS	REFERENCE	REMARK	
1	1-4	<b>REPORTING AND REVISION OF LAST TERM'S EXAMS</b>							
2	1-2	Electrostatics	Charging materials by induction and contact	By the end of the lesson, the learner should be able to: Explain the charging of materials by induction and contact Describe origin of charge State the law of charges	Demonstrations Discussions Experiments	Polythene bags Thrust Glass rod	Comprehensive secondary physics Students Book 1 page 89 Teacher's Book 1 pages 29-32 Secondary Physics students Book 1 (KLB) pages 245-250 Golden tips physics pages 133-134 Principles of Physics(M.Nelko) pages 264		
	3	Electrostatics	Laws of charge	By the end of the lesson the learner should be able to: Describe the electrostatic charge Explain the electrostatic charge State types of charge	Experiments Discussion Observations	Rubber Piece of paper Glass Amber Silk material Fur Electroscope	Comprehensive secondary physics Students Book 1 page 89-91 Teacher's Book 1 pages 29-32 Secondary Physics students Book 1 (KLB) pages 245-248 Golden tips physics pages 133 Principles of Physics(M.Nelko) pages 509-510		
	4	Electrostatics	The leaf electroscope	By the end of the lesson, the learner should be able to State the unit of charges and construct leaf electroscope	Discussions Constructing an electroscope Experiment	Leaf electroscope Glass rod	Comprehensive secondary physics Students Book 1 page 91-92 Teacher's Book 1 pages 29-32 Secondary Physics students Book 1 (KLB) pages 251-252 Golden tips physics pages 133 Principles of Physics(M.Nelko) pages 511		

3	1-2	Electrostatics	Charging an electroscope by contact	By the end of the lesson, the learner should be able to charge an electroscope by contact	Demonstration Discussions Experiments	Electroscope Glass rod Ebonite rod	Comprehensive secondary physics Students Book 1 page 94-96 Teacher's Book 1 pages 29-32 Secondary Physics students Book 1 (KLB) pages 249-250 Golden tips physics pages 134 Principles of Physics(M.Nelko) pages 512	
	3	Electrostatics	Charging an electroscope by induction	By the end of the lesson, the learner should be able to charge an electroscope by induction	Demonstrations Discussions Experiments	Electroscope Glass rod Ebonite rod	Comprehensive secondary physics Students Book 1 page 94-96 Teacher's Book 1 pages 29-32 Secondary Physics students Book 1 (KLB) pages 248-249 Principles of Physics(M.Nelko) pages 513-515	
	4	Electrostatics	Charging an electroscope by separation	By the end of the lesson, the learner should be able to charge an electroscope by separation	Discussions Experiments Descriptions	Rods of conductors and non-conductors Electroscope Tiles	Comprehensive secondary physics Students Book 1 page 96-97 Teacher's Book 1 pages 29-32 Secondary Physics students Book 1 (KLB) pages 250-251	
4		<b>MID TERM BREAK</b>						
5	1-2	Electrostatics	Charging an electroscope by EHT source	By the end of the lesson, the learner should be able to Charge electroscope by an EHT source	Descriptions Experiments Discussions	Rods of conductors and non-conductors Electroscope Tiles	Comprehensive secondary physics Students Book 1 page 97 Teacher's Book 1 pages 29-32	

	3	Cells And Simple Circuits	Sources of continuous current	By the end of the lesson, the learner should be able to state sources of continuous current	Experiments Discussions Demonstration	Cells Acids Fruits Solar panels Petroleum products	Comprehensive secondary physics Students Book 1 page 99-100 Teacher's Book 1 pages 34-37 Secondary Physics students Book 1 (KLB) pages 261-265 Golden tips physics pages 140	
	4	Cells And Simple Circuits	Connecting an electric circuit	By the end of the lesson, the learner should be able to Draw and set up a simple electric circuit Identify circuit symbols	Identifying circuit symbols Discussions Demonstrations Experiments	Cells Wires Bulbs Charts on circuit symbols	Comprehensive secondary physics Students Book 1 page 99-101 Teacher's Book 1 pages 34-37 Secondary Physics students Book 1 (KLB) pages 266-273	
6	1-2	Cells And Simple Circuits	The measuring of E.M.F	By the end of the lesson, the learner should be able to measure e.m.f	Experiments Discussions Measuring Demonstrations	Ammeter Voltmeter Switch	Comprehensive secondary physics Students Book 1 page 101-102 Teacher's Book 1 pages 34-37 Secondary Physics students Book 1 (KLB) pages 264	
	3	Cells And Simple Circuit	Conductivity of materials	By the end of the lesson, the learner should be able to Investigate the electrical conductivity of materials	Calculating Testing Conductivity Experiments	Conductors Non-conductors	Comprehensive secondary physics Students Book 1 page 101-103 Teacher's Book 1 pages 34-37 Secondary Physics students Book 1 (KLB) pages 273-275 Principles of Physics(M.Nelko) pages	
	4	Cells And Simple Circuits	Measuring current in a circuit	By the end of the lesson, the learner should be able to measure current in a circuit	Measuring Experiments Calculating	Voltmeter Ammeter Switch	Comprehensive secondary physics Students Book 1 page 101-103 Teacher's Book 1 pages 34-37 Secondary Physics students Book 1 (KLB) pages 266-269	

7	1-2	Cells And Simple Circuits	Primary cells	By the end of the lesson, the learner should be able to: Describe the working of primary cells Explain the defects of primary cells Explain how to care for a primary cell	Discussions Experiments Explaining the defects of primary cells	Primary cells	Comprehensive secondary physics Students Book 1 page 104-106 Teacher's Book 1 pages 34-37 Secondary Physics students Book 1 (KLB) pages 276-280	
	3	Cells And Simple Circuits	Measuring e.m.f in a primary cell	By the end of the lesson, the learner should be able to: Measure e.m.f in a primary	Experiments Discussions Demonstrations Measuring	Primary cells Voltmeter Switch	Comprehensive secondary physics Students Book 1 page 106 Teacher's Book 1 pages 34-37 Secondary Physics students Book 1 (KLB) pages 276-280	
	4	Cells And Simple Circuits	Secondary cells	By the end of the the lesson the learner should be able to: Charge a secondary cell Discharge a secondary cell Take care of a secondary cell	Explanation on charging and maintenance of simple cells	Secondary cells	Comprehensive secondary physics Students Book 1 page 106-109 Teacher's Book 1 pages 34-37 Secondary Physics students Book 1 (KLB) pages 280-284	
8-9		<b>END OF TERM EXAMS AND CLOSURE</b>						