**PHYSICS SCHEMES OF WORK**

**FORM ONE 2016**

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**PHYSICS SCHEMES OF WORK**

**FORM ONE 2016**

**TERM I**

**REFERENCES:**

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

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| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **L/ACTIVITIES** | **L/T AIDS** | **REFERENCE** | **REMARKS** |
| **1-4** |  | **REPORTING** |  |
| 5 | 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 involvesRelate physics to other subjects and to technologyIdentify career opportunities related to physics | Discussions of value and meaning of physicsDrawing flow charts of the braches of physicsListing career opportunities related to physics | Chart on definition of physicsFlow charts on branches of physicsChart on scientific methodList of career related to physics | Comprehensive secondary physicsStudents Book 1 page 1-2Teacher’s Book 1 pages 1-3Secondary Physics students Book 1 (KLB) pages 1-6 |  |
|  | 3-4 | Introduction To Physics | Basic laboratory rules | By the end of the lesson, the learner should be able toState and explain the basic laboratory rules | DiscussionsExplanation of rules | Chart on standard laboratory rulesPictures showing dangers of not observing laboratory rules | Comprehensive secondary physicsStudents Book 1 page 1-2Teacher’s Book 1 pages 1-3Secondary Physics students Book 1 (KLB) pages 6-7 |  |
| 6 | 1-2 | 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 | ConversionsMeasuringExperimentCountingDemonstrations | Meter ruleBurettePipetteMeasuring cylinderWeighing balanceRodShadow | Comprehensive secondary physicsStudents Book 1 page 4-8Teacher’s Book 1 pages 4-6Secondary Physics students Book 1 (KLB) pages 8,22,14,33Golden tips physics pages 1-7Principles of Physics(M.Nelkon) pages 4-9 |  |
|  | 3-4 | Measurements | Measuring instruments | By the end of the lesson, the learner should be able to:Use measuring instrument accuratelyMetre rule, tape measure, beam balance, stop clock, measuring cylinder, pipette and burette | DemonstrationsReading scales and correcting errors | Meter rulePipettesBurettesStop watchesTape measureMeasuring cylinder, beam balance | Comprehensive secondary physicsStudents Book 1 page 6-7Teacher’s Book 1 pages 5-6Secondary Physics students Book 1 (KLB) pages 10,28Golden tips physics pages 2Principles of Physics(M.Nelkon) pages 7-9 |  |
| 7 | 1-2 | Measurements  | Measuring density | By the end of the lesson, the learner should be able to:Determine and mentally explain the density of substancesWork our density of mixturesSolve numerical problems involving density | ExperimentWorking out answers to problems | Measuring cylinderMass weighing balanceDensity bottle | Comprehensive secondary physicsStudents Book 1 page 9-12Teacher’s Book 1 pages 4-6Secondary Physics students Book 1 (KLB) pages 35-48Golden tips physics pages 7,10 |  |
|  | 3-4 | Measurements | Measuring Time | By the end of the lesson, the learner should be able toDetermine experimentally, the measurement of time | Experiments with pendulumTiming events | PendulumClockWatch | Comprehensive secondary physicsStudents Book 1 page 12-15Teacher’s Book 1 pages 6Secondary Physics students Book 1 (KLB) pages 46-47Golden tips physics pages 8Principles of Physics(M.Nelkon) pages 23 |  |
| 8 | 1-2 | Forces  | Types of forces | By the end of the lesson, the learner should be able toDefine force and state its SI unitsDescribe types of forcesState the effects of force | DiscussionsExplainingDemonstrationsIdentifying effects of forces | Charts of forceStringElastic materialMagnetsWater GreeceOil spring balance | Comprehensive secondary physicsStudents Book 1 page 61-19Teacher’s Book 1 pages 6-10Secondary Physics students Book 1 (KLB) pages 49-68Golden tips physics pages 11-12Principles of Physics(M.Nelkon) pages 64-65 |  |
|  | 3-4 | Forces | Surface tension | By the end of the lesson, the learner should be able to:Describe experiments to illustrate cohesion, adhesion and surface tensionState the factors affecting surface tension, its consequence and importance | DiscussionsDemonstrationsExplaining the effects of surface tensions | FunnelWater Wire loopTapSoap/detergent | Comprehensive secondary physicsStudents Book 1 page 19-22Teacher’s Book 1 pages 6-10Secondary Physics students Book 1 (KLB) pages 63-70Golden tips physics pages 12 |  |
| 9 | 1-2 | Forces  | Mass and weight | By the end of the lesson, the learner should be able to:State and explain the relationship between mass and weightDefine scalar and vector magnitude  | DemonstrationsDiscussionsProblems solving on mass and weight | Beam balanceSpring balanceSpongeStorePolythene | Comprehensive secondary physics Students Book 1 page 17-22Teacher’s Book 1 pages 6-10Secondary Physics students Book 1 (KLB) pages 72-75Golden tips physics pages 7Principles of Physics(M.Nelkon) pages 40 |  |
|  | 3-4 | Forces | Measuring Force | By the end of the lesson, the learner should be able to:Measure weight using spring balanceSolve numerical problems on numerical forces | DiscussionsExperiments | Spring balanceChart on vectors and scalars | Comprehensive secondary physicsStudents Book 1 page 17-18Teacher’s Book 1 pages 17-15 |  |
| 10 | 1-2 | Forces  | Pressure and force | By the end of the lesson, the learner should be able to:Define pressure and state its SI unitsDetermine pressure exerted by solids | DiscussionsDemonstrationsProblem solving | Block of woodSpring balanceMeter rule | Comprehensive secondary physicsStudents Book 1 page 6-10Teacher’s Book 1 pages 6-10Secondary Physics students Book 1 (KLB) pages 82-85Golden tips physics pages 44Principles of Physics(M.Nelkon) pages 119-121 |  |
|  | 3-4 | Pressure | Pressure in liquids | By the end of the lesson, the learner should be able toInvestigate experimentally the factors that affect pressure in liquids (Fluids)Derive the formula for calculating pressure in fluidsState the principle of transmission of pressure in fluids | DemonstrationsWorking out problemsDiscussionsExperiments | Communication tubesTin with holes at different heightsWaters | Comprehensive secondary physics Students Book 1 page 27-30Teacher’s Book 1 pages 12-15Secondary Physics students Book 1 (KLB) pages 49-68Golden tips physics pages 44-45Principles of Physics(M.Nelkom) pages 121-124 |  |
| 11 | 1-2 | Pressure | Pressure in gases | By the end of the lesson, the learner should be able toExplain atmospheric pressure and its effectsState and explain how pressure is transmitted in fluids | DemonstrationsExplanation of pressure transmission in fluidsdiscussions | Water/oilSyringe | Comprehensive secondary physics Students Book 1 page 25-26,30-32Teacher’s Book 1 pages 12-15Secondary Physics students Book 1 (KLB) pages 115-116,93-100Golden tips physics pages 45-46Principles of Physics(M.Nelko) pages 124 |  |
|  | 3-4 | Pressure | Ganges and siphons | By the end of the lesson, the learner should be able to Describe the working of siphon and pressure gauge | DiscussionsExplanationsQuestions and answers | BarometerBourdon gaugeSyringes | Comprehensive secondary physics Students Book 1 page 31-34Teacher’s Book 1 pages 13-15Secondary Physics students Book 1 (KLB) pages 113,117Golden tips physics pages 44-45Principles of Physics(M.Nelko) pages 133 |  |
| 12 | 1-2 | Pressure  | Application of pressure in liquids and gases | By the end of the lesson, the learner should be able toExplain the working of a hydraulic, braking system of vehicleExplain the working of mercury and forties barometer, bicycle pump and pressure gauges | Explaining the application of pressure in liquids and gasesClass discussion on the principles of pressure in liquidsExperiments | Chart showing the working of a hydraulic braking systemModel of hydraulic brake systemBarometerBicycle pump | Comprehensive secondary physics Students Book 1 page 30-39Teacher’s Book 1 pages 13-15Secondary Physics students Book 1 (KLB) pages 96-112Golden tips physics pages 46-47Principles of Physics(M.Nelko) pages 124-132 |  |
|  | 3-4 | Pressure | Revision on question on the topic pressure | By the end of the lesson, the learner should be able toAnswer questions on pressure | Questions and answers | Questions in students book 1 | Comprehensive secondary physicsStudents Book 1 page 39-41Teacher’s Book 1 pages 13-15Secondary Physics students Book 1 (KLB) pages 119-123Golden tips physics pages 54-55Principles of Physics(M.Nelko) pages 138-140 |  |
| 13 |  | **TOPICAL REVISION** |  |
| 14 |  | **END OF TERM EXAMS** |  |
| 15 |  | **REPORTS MAKING AND CLOSURE** |  |

**PHYSICS SCHEMES OF WORK**

**FORM ONE 2016**

**TERM II**

**REFERENCES:**

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

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **L/ACTIVITIES** | **L/T AIDS** | **REFERENCE** | **REMARKS** |
| **1** | **1-4** | **REPORTING AND REVISION OF LAST TERM’S EXAMS** |  |
| **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 | DemonstrationDiscussions of kinetic theory | BeakerCrystalsSolutesSolvent | Comprehensive secondary physics Students Book 1 page 42Teacher’s Book 1 pages 15-18Secondary Physics students Book 1 (KLB) pages 124-128Golden tips physics pages 68Principles of Physics(M.Nelko) pages 142 |  |
|  | **3-4** | 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 particlesDemonstrate the Brownian motion in liquids & gasesExplain the arrangement of particles in matterExplain the state on matter in terms of particle movement | ExperimentsObservationsDiscussions | Chalk dustTransparent lidPollen grainsLensBeakerSmoke cellSource of light | Comprehensive secondary physicsStudents Book 1 page 43-48Teacher’s Book 1 pages 15-18Secondary Physics students Book 1 (KLB) pages 127-130Golden tips physics pages 68Principles of Physics(M.Nelko) pages 148-150 |  |
| **3** | **1-2** | Particulate Nature Of Matter | Diffusion in liquid, gases and solids | By the end of the lesson, the learner should be able toExplain diffusion in gases/liquids and solids | ExperimentsDiscussions | Promise gasJarsPotassium permanganateSolventHydrochloric acidAmmoniaGlass tube cotton wool | Comprehensive secondary physics Students Book 1 page 46-49Teacher’s Book 1 pages 15-18Secondary Physics students Book 1 (KLB) pages 132-136Golden tips physics pages 69Principles of Physics(M.Nelko) pages 146-147 |  |
|  | **3-4** | 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 | DiscussionDemonstrationsAsking questionsAnswering questions |  | Secondary Physics students Book 1 (KLB) pages 136-138Golden tips physics pages 69-70Principles of Physics(M.Nelko) pages 164Past Papers |  |
|  | **1-2** | Thermal Expansion | Expansion of solids | By the end of the lesson, the learner should be able to:Define temperatureDescribe the functionally of various thermometersExplain the expansion and contraction in solidsExplain forces due to expansion and contraction | ExperimentsDemonstrationExperiments | Meter ruleMetal rodsMaterials that conduct or do not conduct heatBall and ring apparatusBar gauge | Comprehensive secondary physicsStudents Book 1 page 50-52Teacher’s Book 1 pages 18-21Secondary Physics students Book 1 (KLB) pages 139-144Golden tips physics pages 70-72Principles of Physics(M.Nelko) pages 168,175-176 |  |
|  | **3-4** | 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 | DemonstrationsDiscussionsExperiments | Charts on the application of expansionRivetsBimetallic strips | Comprehensive secondary physicsStudents Book 1 page 52-54Teacher’s Book 1 pages 18-21Secondary Physics students Book 1 (KLB) pages 145,151-153Golden tips physics pages 73Principles 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 liquidDescribe the anomalous expansion of water and its effect | DiscussionsExperimentsDemonstrations | WaterSpiritAlcoholthermometer | Comprehensive secondary physicsStudents Book 1 page 54-56Teacher’s Book 1 pages 18-21Secondary Physics students Book 1 (KLB) pages 149-155Golden tips physics pages 72-73Principles of Physics(M.Nelko) pages 182 |  |
|  | **3-4** | Thermal Expansion | Thermometers | By the end of the lesson, the learner should be able to:Explain the functioning of various thermometersDescribe the functioning of various thermometers | DemonstrationsDiscussions | Liquid in glass thermometersClinical thermometersMaximum and minimum thermometers | Comprehensive secondary physicsStudents Book 1 page 56-59Teacher’s Book 1 pages 18-21Secondary Physics students Book 1 (KLB) pages 155-161Golden tips physics pages 70-72Principles of Physics(M.Nelko) pages 168-173 |  |
| **5** | **1-2** | 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 | DiscussionsExperimentsDemonstrations | SolidsLiquidsAirSource of heat Containers  | Comprehensive secondary physicsStudents Book 1 page 60-61Teacher’s Book 1 pages 18-21Secondary Physics students Book 1 (KLB) pages 139-162 |  |
|  | **3-4** | Thermal Expansion | Revision on thermal expansion | By the end of the lesson, the learner should be able to:Answer questions involving thermal expansions | Questionsanswers | Set questions | Comprehensive secondary physicsStudents Book 1 page 61-62Teacher’s Book 1 pages 21Secondary Physics students Book 1 (KLB) pages 161-162Golden tips physics pages 85-86Principles of Physics(M.Nelko) pages 185 |  |
| **6** | **1-2** | Heat Transfer | Heat and temperature | By the end of the lesson, the learner should be able todefine heatState the difference between heat and temperature | DefinitionsDiscussionsExperiments | Materials that conduct heat and materials that do not conduct heat | Comprehensive secondary physicsStudents Book 1 page 63Teacher’s Book 1 pages 22-24Secondary Physics students Book 1 (KLB) pages 163Golden tips physics pages 774Principles of Physics(M.Nelko) pages 168 |  |
|  | **3-4** | Heat Transfer | Conduction of heat | By the end of the lesson, the learner should be able to:State and explain modes of heat transferExplain factors affecting conduction |  | Metal rodsSource of heatTest tubeWaterIce in gauge | Comprehensive secondary physicsStudents Book 1 page 63-67Teacher’s Book 1 pages 22-24Secondary Physics students Book 1 (KLB) pages 163-186Golden tips physics pages 74-77Principles of Physics(M.Nelko) pages 234-242 |  |
| **7** | **1-2** | Heat Transfer | Convection | By the end of the lesson, the learner should be able toDemonstrate convection in liquidsExplain the working of hot water systems, car engine, cooling system and land sea breezeExplain the molecular application of convection in fluids | ExperimentsDiscussion  | WaterPotassium permanganateSource of heatSmoke cell apparatusChart on hot water systemCar engine | Comprehensive secondary physicsStudents Book 1 page 67-69Teacher’s Book 1 pages 23Secondary Physics students Book 1 (KLB) pages 177-188Principles of Physics(M.Nelko) pages 238-2433 |  |
|  | **3-4** | Heat Transfer  | Radiation | By the end of the lesson, the learner should be able to Compare absorption and emission of radiant heatExplain the working of solar concentrators, heat taps and solar heatersExplain the working of a thermos flask |  | ExperimentsMaking comparisonsDiscussionsExplanations | Comprehensive secondary physicsStudents Book 1 page 70-74Teacher’s Book 1 pages 18-24Secondary Physics students Book 1 (KLB) pages 187-195Golden tips physics pages 75Principles of Physics(M.Nelko) pages 246 |  |
| **8** | **1-2** |  | REVISION | By the end of the lesson, the learner should be able toAnswer questions on heat transfer | QuestionsAnswers | Set questions |  |  |
|  | **3-4** | 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 objectsDescribe the types of beamsPerform and describe experiments to show rectilinear propagation of light | DiscussionsExperimentsDescriptionsExplanations | Opaque objectsGlassGreased paperCard boardSource of light Screens | Comprehensive secondary physicsStudents Book 1 page 76-77Teacher’s Book 1 pages 25-27Secondary Physics students Book 1 (KLB) pages 199-204Golden tips physics pages 75Principles of Physics(M.Nelko) pages 251-252 |  |
| **9** | **1-2** | 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 | ExperimentsDrawingDiscussion | Pin hole cameraSource of light (candle) | Comprehensive secondary physicsStudents Book 1 page 77Teacher’s Book 1 pages 25-27Secondary Physics students Book 1 (KLB) pages 211-219Golden tips physics pages 99Principles of Physics(M.Nelko) pages 252-255 |  |
|  | **3-4** | 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 shadowsDescribe the solar and linear eclipses | ExperimentsDiscussionsDemonstrationsExplanationsDescriptions | Opaque objectsChart of the eclipse of earth and moonSource of lightScreen | Comprehensive secondary physicsStudents Book 1 page 78-79Teacher’s Book 1 pages 25-27Secondary Physics students Book 1 (KLB) pages 203-219Principles of Physics(M.Nelko) pages 254-257 |  |
| **10** | **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 DescriptionsExplanationsDiscussions | Plane mirrorsPinsWhite sheets of paperSoft boards | Comprehensive secondary physicsStudents Book 1 page 80-82Teacher’s Book 1 pages 25-27Secondary Physics students Book 1 (KLB) pages 222-228Golden tips physics pages 100Principles of Physics(M.Nelko) pages 260 |  |
|  | **3-4** | Recti-Linear Propagation And Reflection Of Light On Plane Surfaces | Image formation | By the end of the lesson, the learner should be able to:*© Education Plus Agencies*Locate images in place mirrors and state their characteristics | ExperimentsDescriptionsDiscussions | PinsBoardsProtractorMirror | Comprehensive secondary physicsStudents Book 1 page 83-84Teacher’s Book 1 pages 25-27Secondary Physics students Book 1 (KLB) pages 228-230Golden tips physics pages 100-101Principles of Physics(M.Nelko) pages 264 |  |
| **11** | **1-2** | 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 angleExplain the working of a periscope and kaleidoscope | ExperimentsExplanationsDescriptionsDiscussions | Plane mirrorsObjects such as candlesPipeCard board | Comprehensive secondary physicsStudents Book 1 page 84-86Teacher’s Book 1 pages 25-27Secondary Physics students Book 1 (KLB) pages 235-240Golden tips physics pages 101 |  |
|  | **3-4** | Recti-Linear Propagation And Reflection Of Light On Plane Surfaces | Revision | By the end of the lesson, the learner should be able to solve problems involving the propagation and reflection of light on plane surfaces | Problem solvingQuestions and answersDiscussion | Set questions | Comprehensive secondary physicsStudents Book 1 page 87-88Teacher’s Book 1 pages 28-29Secondary Physics students Book 1 (KLB) pages 241-244Golden tips physics pages 101-102Principles of Physics(M.Nelko) pages 266-267 |  |
| **12** | **TOPICAL REVISION** |
| **13** | **END OF TERM EXAMINATIONS** |
| **14** | **REPORTS MAKING AND CLOSURE** |

**PHYSICS SCHEMES OF WORK**

**FORM ONE 2016**

**TERM III**

**REFERENCES:**

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

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| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **L/ACTIVITIES** | **L/T AIDS** | **REFERENCE** | **REMARKS** |
| **1** | **1-4** | **REPORTING AND REVISION OF LAST TERM’S EXAMS** |  |
| **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 contactDescribe origin of chargeState the law of charges | DemonstrationsDiscussionsExperiments | Polythene bagsThrustGlass rod | Comprehensive secondary physicsStudents Book 1 page 89Teacher’s Book 1 pages 29-32Secondary Physics students Book 1 (KLB) pages 245-250Golden tips physics pages 133-134Principles of Physics(M.Nelko) pages 264 |  |
|  | **3-4** | Electrostatics | Laws of charge | By the end of the lesson the learner should be able to:Describe the electrostatic chargeExplain the electrostatic chargeState types of charge | ExperimentsDiscussionObservations | RubberPiece of paperGlassAmberSilk materialFurElectroscope | Comprehensive secondary physicsStudents Book 1 page 89-91Teacher’s Book 1 pages 29-32Secondary Physics students Book 1 (KLB) pages 245-248Golden tips physics pages 133Principles of Physics(M.Nelko) pages 509-510 |  |
| **3** | **1-2** | Electrostatics | The leaf electroscope | By the end of the lesson, the learner should be able toState the unit of charges and construct leaf electroscope | DiscussionsConstructing an electroscopeExperiment | Leaf electroscopeGlass rod | Comprehensive secondary physicsStudents Book 1 page 91-92Teacher’s Book 1 pages 29-32Secondary Physics students Book 1 (KLB) pages 251-252Golden tips physics pages 133Principles of Physics(M.Nelko) pages 511 |  |
|  | **3-4** | Electrostatics | Charging an electroscope by contract | By the end of the lesson, the learner should be able to charge an electroscope by contact | DemonstrationDiscussionsExperiments | ElectroscopeGlass rodEbonite rod | Comprehensive secondary physicsStudents Book 1 page 94-96Teacher’s Book 1 pages 29-32Secondary Physics students Book 1 (KLB) pages 249-250Golden tips physics pages 134Principles of Physics(M.Nelko) pages 512 |  |
| **4** | **1-2** | Electrostatics  | Charging an electroscope by induction | By the end of the lesson, the learner should be able to charge an electroscope by induction | DemonstrationsDiscussionsExperiments | ElectroscopeGlass rodEbonite rod | Comprehensive secondary physicsStudents Book 1 page 94-96Teacher’s Book 1 pages 29-32Secondary Physics students Book 1 (KLB) pages 248-249Principles of Physics(M.Nelko) pages 513-515 |  |
|  | **3-4** | Electrostatics | Charging an electroscope by separation | By the end of the lesson, the learner should be able to charge an electroscope by separation | DiscussionsExperimentsDescriptions | Rods of conductors and no-conductorsElectroscopeTiles | Comprehensive secondary physicsStudents Book 1 page 96-97Teacher’s Book 1 pages 29-32Secondary Physics students Book 1 (KLB) pages 250-251 |  |
| **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 | DescriptionsExperimentsDiscussions | Rods of conductors and non-conductorsElectroscopeTiles | Comprehensive secondary physicsStudents Book 1 page 97Teacher’s Book 1 pages 29-32 |  |
|  | **3-4** | Electrostatics | Revision | By the end of the lesson, the learner should be able to answer questions on electrostatics | Questions and answers | ChalkboardText books | Secondary Physics students Book 1 (KLB) pages 259-260Principles of Physics(M.Nelko) pages 527-530Golden tips physics pages 138-139 |  |
| **6** | **1-2** | 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 | ExperimentsDiscussionsDemonstration | CellsAcidsFruitsSolar panelsPetroleum products | Comprehensive secondary physicsStudents Book 1 page 99-100Teacher’s Book 1 pages 34-37Secondary Physics students Book 1 (KLB) pages 261-265Golden tips physics pages 140Principles of Physics(M.Nelko) pages 408-409 |  |
|  | **3-4** | Cells And Simple Circuits | Connecting an electric circuit | By the end of the lesson, the learner should be able toDraw and set up a simple electric circuitIdentify circuit symbols | Identifying circuit symbolsDiscussionsDemonstrationsExperiments | CellsWiresBulbsCharts on circuit symbols | Comprehensive secondary physicsStudents Book 1 page 99-101Teacher’s Book 1 pages 34-37Secondary Physics students Book 1 (KLB) pages 266-273Golden tips physics pages 140Principles of Physics(M.Nelko) pages 408-409 |  |
| **7** | **1-2** | Cells And Simple Circuit | Connecting and electric circuit | By the end of the lesson the learner should be able toDefine electric currentExplain the working of a cellConnect cells in series and parallelMeasure the effective e.m.f | MeasuringDemonstrationsDiscussionsExperiments | CellsConnecting wiresBulbs | Comprehensive secondary physicsStudents Book 1 page 100-101Teacher’s Book 1 pages 34-37Secondary Physics students Book 1 (KLB) pages 241-273Golden tips physics pages 140-143 |  |
|  | **3-4** | 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 | ExperimentsDiscussionsMeasuring Demonstrations | AmmeterVoltmeterSwitch | Comprehensive secondary physicsStudents Book 1 page 101-102Teacher’s Book 1 pages 34-37Secondary Physics students Book 1 (KLB) pages 264Golden tips physics pages 143Principles of Physics(M.Nelko) pages 409 |  |
| **8** | **1-2** | Cells And Simple Circuit | Conductivity of materials | By the end of the lesson, the learner should be able toInvestigate the electrical conductivity of materials | Calculating TestingConductivityExperiments | ConductorsNon-conductors | Comprehensive secondary physicsStudents Book 1 page 101-103Teacher’s Book 1 pages 34-37Secondary Physics students Book 1 (KLB) pages 273-275Principles of Physics(M.Nelko) pages  |  |
|  | **3-4** | 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 ExperimentsCalculating | VoltmeterAmmeterSwitch  | Comprehensive secondary physicsStudents Book 1 page 101-103Teacher’s Book 1 pages 34-37Secondary Physics students Book 1 (KLB) pages 266-269Golden tips physics pages 142 |  |
| **9** | **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 cellsExplain the defect s of primary cellsExplain how to care for a primary cell | DiscussionsExperimentsExplaining the defects of primary cells | Primary cells | Comprehensive secondary physicsStudents Book 1 page 104-106Teacher’s Book 1 pages 34-37Secondary Physics students Book 1 (KLB) pages 276-280Principles of Physics(M.Nelko) pages 409-414 |  |
|  | **3-4** | 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 | ExperimentsDiscussionsDemonstrationsMeasuring | Primary cellsVoltmeterSwitch | Comprehensive secondary physicsStudents Book 1 page 106Teacher’s Book 1 pages 34-37Secondary Physics students Book 1 (KLB) pages 276-280Principles of Physics(M.Nelko) pages 409-414 |  |
| **10** | **1-2** | Cells And Simple Circuits | Secondary cells | By the end of the the lesson the learner should be able to:Charge a secondary cellDischarge a secondary cellTake care of a secondary cell | Explanation on charging and maintenance of simple cells | Secondary cells | Comprehensive secondary physicsStudents Book 1 page 106-109Teacher’s Book 1 pages 34-37Secondary Physics students Book 1 (KLB) pages 280-284Golden tips physics pages 140 |  |
|  | **3-4** | Revision |  | By the end of the lesson, the learner should be able toAnswer questions on cellsAnswer questions on circuits | DiscussionsDemonstrationsAsking questionsAnswering questions |  | Secondary Physics students Book 1 (KLB) pages 287-288Golden tips physics pages 150-151Principles of Physics(M.Nelkon) pages 422-423 |  |
| **11** |  | **END OF TERM EXAMS** |  |
| **12** |  | **REPORTS MAKING AND CLOSURE** |  |