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| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **L/ACTIVITIES** | **L/T AIDS** | **REFERENCE** | **Remarks** |
| **1** |  | **OPENING AND SERIES ONE EXAMS** | | | | | | |
| **2** | **1-5** | Waves II |  | By the end of the lesson, the learner should be able to:  State and explain the properties of waves experimentally  Sketch wave fronts to illustrate the reflections | Stating and explaining the properties of waves  Sketching wave fronts illustrate reflection | Rope/wire  Various reflections | Comprehensive secondary  physics students book 3 pages 67-69  Comprehensive secondary physics teachers book 3 pages 29-32  Secondary physics KLB students book 3 page 198-203  Physics made easier vol. 2 pages 64-65  Secondary physics (M.N Patel) pages 134-142 |  |
|  | 3-5 | Waves II | Diffraction, refraction and interference of waves | By the end of the lesson, the learner should be able to:  Sketch various wave fonts to illustrate their diffraction, refraction and interference | Sketching various wave fonts  Experiments to illustrate refraction, diffraction and interference | Water  Basin  Ripple  Tank | Comprehensive secondary physics students book 3 pages 70-73  Comprehensive secondary physics teachers book 3 pages 29-32  Secondary physics KLB students book 3 page 203-212  Physics made easier vol. 2 pages 65-66  Secondary physics (M.N Patel) pages 142-144 |  |
| 3 | 1-2 | Waves II | Constructive and distractive waves | By the end of the lesson, the learner should be able to:  Explain constructive and destructive interference | Discussion on constructive and destructive interference  Experiments constructive and destructive interference | Ripple tank  Rope/wire | Comprehensive secondary physics students book 3 pages 73-74  Comprehensive secondary physics teachers book 3 pages 29-32  Secondary physics KLB students book 3 page 203-212  Physics made easier vol. 2 pages 65-66  Secondary physics (M.N Patel) pages 144-147 |  |
|  | 3-5 | Waves II | Stationary waves | By the end of the lesson, the learner should be able to:  Describe experiments to illustrate stationary waves | Demonstration and explaining of stationery waves | Wires under tension | Comprehensive secondary physics students book 3 pages 74  Comprehensive secondary physics teachers book 3 pages 29-32  Secondary physics KLB students book 3 page 212-215  Physics made easier vol. 2 pages 66-67  Secondary physics (M.N Patel) pages 147-148 |  |
| 4 | 1 | Waves II | Vibrating air columns | By the end of the lesson, the learner should be able to:  Describe and explain closed pipe and open pipe | Describing vibrations in close and open pipes | Open and closed pipes | Comprehensive secondary physics students book 3 pages 74  Comprehensive secondary physics teachers book 3 pages 29-32  Secondary physics KLB students book 3 page 218-220  Physics made easier vol. 2 pages 67-73  Secondary physics (M.N Patel) pages 148-149 |  |

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|  | 2 | Electrostatics Ii | Electric field patterns | By the end of the lesson, the learner should be able to  Sketch electric field patterns around charged bodies | Discussion on electric field patterns  Observing and plotting field patterns | Charts on magnetic fields | Comprehensive secondary physics students book 3 pages 76-77  Comprehensive secondary physics teachers book 3 pages 34-39  Secondary physics KLB students book 3 page 222-225  Physics made easier vol. 2 pages 76-77  Secondary physics (M.N Patel) pages 151-152 |  |
|  | 3-5 | Electrostatics Ii | Charge distribution on conductors | By the end of the lesson, the learner should be able to  Describe charge distribution on conductors:  Spherical and pear shaped conductors | Discussions on charge distribution on conductors  Experiment is demonstrated/illustrate charge distribution on conductors | Vande Graaf generator  Chart showing charge distribution on different conductors  Gold leaf electroscope | Comprehensive secondary physics students book 3 pages 77-78  Comprehensive secondary physics teachers book 3 pages 34-39  Secondary physics KLB students book 3 page 225-228  Physics made easier vol. 2 pages 77-78  Secondary physics (M.N Patel) pages 153-154 |  |
| 5 | 1-2 | Electrostatics Ii | Lighting arrestor | By the end of the lesson, the learner should be able to:  Explain how lightning arrestor works | Discussions on the lighting arrestor  Explanations on the lighting arrestor | Improvised lighting arrestor  Photographs of lightning arrestor | Comprehensive secondary physics students book 3 pages 79-80  Comprehensive secondary physics teachers book 3 pages 34-39  Secondary physics KLB students book 3 page 229-230  Physics made easier vol. 2 pages 79  Secondary physics (M.N Patel) pages 155 |  |
|  | 3-5 | Electrostatics Ii | Capacitance | By the end of the lesson, the learner should be able to:  Define capacitance and state its SI units  Describe the charging and discharging of a capacitor  State and explain the factors that affect the capacitance of a parallel plate capacitor | Experiments on charging and discharging capacitor  Discussion on factors affecting capacitance  Defining capacitance | Complete circuits  capacitors | Comprehensive secondary physics students book 3 pages 80-82  Comprehensive secondary physics teachers book 3 pages 34-39  Secondary physics KLB students book 3 page 230-237  Physics made easier vol. 2 pages 79-80  Secondary physics (M.N Patel) pages 155-158 |  |
| 6 | 1-2 | Electrostatics Ii | Combinations of capacitors | By the end of the lesson, the learner should be able to:  Derive the effective capacitance of capacitors in series and parallel | Deriving effective capacitance of capacitors in series and parallel  Solving problems  Discussion in the effective capacitance | Capacitors in series and parallel connections  Charts showing complete circuits | Comprehensive secondary physics students book 3 pages 80-82  Comprehensive secondary physics teachers book 3 pages 34-39  Secondary physics KLB students book 3 page 237-241  Physics made easier vol. 2 pages 81-82  Secondary physics (M.N Patel) pages 155-158 |  |
|  | 3 | Electrostatics Ii | Energy stored in a charged capacitor | By the end of the lesson, the learner should be able to:  Describe the energy stored in a charged capacitor | Describing the energy stored in a charged capacitor | Capacitors  Dry cells  Charts on capacitors used | Comprehensive secondary physics students book 3 pages 82  Comprehensive secondary physics teachers book 3 pages 34-39  Secondary physics KLB students book 3 page 244  Physics made easier vol. 2 pages 82  Secondary physics (M.N Patel) pages 159-160 |  |
|  | 4 | Electrostatics | Application of capacitors | By the end of the lesson, the learner should be able to  State and explain the applications of capacitors | Discussions on applications of capacitors  Stating and explaining applications of capacitors | Charts on the use of capacitors  capacitors | Comprehensive secondary physics students book 3 pages 82-84  Comprehensive secondary physics teachers book 3 pages 34-39  Secondary physics KLB students book 3 page 244  Physics made easier vol. 2 pages 82-83  Secondary physics (M.N Patel) pages 161 |  |
|  | 5 | Electrostatics Ii | Revision | By the end of the lesson, the learner should be able to solve numerical problems involving capacitors using the formulae  Q= CV  C1=C1+C1  1/C1= 1/C1+1/C2 | Problem solving | Questions in the students Book 3 | Comprehensive secondary physics students book 3 pages 84-87  Comprehensive secondary physics teachers book 3 pages 38-39  Secondary physics KLB students book 3 page 244-245  Physics made easier vol. 2 pages 85-88  Secondary physics (M.N Patel) pages 161 |  |
| 7 | 1-3 | The Heating Effect Of Electric Current | Electric current heating effect | By the end of the lesson, the learner should be able to:  Perform and describe experiments to illustrate the heating effect of electric current | Experiments to illustrate heating effect of electric current  Discussions on heating effect of electric current | Complete circuit  Water in a beaker  Metallic rod  Thermometer | Comprehensive secondary physics students book 3 pages 88  Comprehensive secondary physics teachers book 3 pages 39-41  Secondary physics KLB students book 3 page 246-247  Physics made easier vol. 2 pages 89  Secondary physics (M.N Patel) pages 162-165 |  |
|  | 4-5 | The Heating Effect Of An Electric Current | Factors affecting electric current | By the end of the lesson, the learner should be able to:  State and explain the factors affecting electrical energy | Discussions on the factors affecting electrical energy  Experiments on electrical energy  Stating and explaining factors affecting the electrical energy | Complete circuit  Wires  Rheostat  Ammeter  battery | Comprehensive secondary physics students book 3 pages 88-90  Comprehensive secondary physics teachers book 3 pages 39-41  Secondary physics KLB students book 3 page 247-255  Physics made easier vol. 2 pages 89-90  Secondary physics (M.N Patel) pages 165-166 |  |
| 8 | 1-2 | The Heating Effect Of Electric Current | Heating devices  fuses | By the end of the lesson, the learner should be able to:  describe the working of electric iron, bulb filament and an electric water | discussion on electric devices  observations and experiments on heating devices | electric irons  electric bulb  electric kettle  electric heater  fuses | Comprehensive secondary physics students book 3 pages 90-91  Comprehensive secondary physics teachers book 3 pages 39-41  Secondary physics KLB students book 3 page 255-258  Physics made easier vol. 2 pages 90-91  Secondary physics (M.N Patel) pages 166-170 |  |
|  | 3-5 | The Heating Effect Of Electric Current | Revision | By the end of the lesson, the learner should be able to  Solve problems involving electrical energy and electric power | Problem solving  Exercises assignment  Discussion on problems involving electrical energy and electrical power | Set questions  Marking scheme | Comprehensive secondary physics students book 3 pages 90-92  Comprehensive secondary physics teachers book 3 pages 41  Secondary physics KLB students book 3 page 246-258-259  Physics made easier vol. 2 pages 92  Secondary physics (M.N Patel) pages 171 |  |
| 9 | 1-2 | Quantity Of Heat | Heat capacity  Specific heat capacity  Units of heat capacity | By the end of the lesson the learner should be able to  Define heat capacity and specific heat capacity and derive their SI units | Experiments on heat capacity and specific heat capacity  Discussion on heat capacity and specific h eat capacity  Defining heat capacity and heat specific heat capacity | Source of heat  Water  Lagged can  Thermometer | Comprehensive secondary physics students book 3 pages 93-96  Comprehensive secondary physics teachers book 3 pages 42-46  Secondary physics KLB students book 3 page 246-260-271  Physics made easier vol. 2 pages 93-94  Secondary physics (M.N Patel) pages 172-174 |  |
|  | 3-4 | Quantity Of Heat | Change of state | By the end of the lesson the learner should be able to define and explain latent heat of fusion, specific latent heat of fusion  Define and explain latent heat of vaporization, specific latent heat of vaporization  State the SI units of latent heat of fusion and latent heat of vaporization | Experiments on latent heat of fusion and latent heat of vaporization  Discussion on latent heat of fusion and latent heat of vaporization | File  Water  Thermometer  Weighing balance  Source of heat | Comprehensive secondary physics students book 3 pages 96-97  Comprehensive secondary physics teachers book 3 pages 42-46  Secondary physics KLB students book 3 page 246-271-281  Physics made easier vol. 2 pages 95-96  Secondary physics (M.N Patel) pages 188-199 |  |
|  | 5 | Quantity Of Heat | Boiling and melting | By the end of the lesson, the learner should be able to:  Distinguish between boiling and melting  State the factors affecting melting points and boiling points of a substance  Describe the working of a pressure cooker and a refrigerator | Distinguishing between boiling and melting points  Stating factors affecting boiling and melting points  Experiments to illustrate boiling and melting point | Pressure cooker  Refrigerator  Charts on melting and boiling points  Ice  Heat  Sufuria  water | Comprehensive secondary physics students book 3 pages 97-101  Comprehensive secondary physics teachers book 3 pages 42-46  Secondary physics KLB students book 3 page 246-282-288  Physics made easier vol. 2 pages 96-98  Secondary physics (M.N Patel) pages 186-187 |  |
| 10 |  | END TERM EXAM AND CLOSING | | | | | |