Dennis

SCHEME OF WORK PHYSICS

FORM 2 2022 TERM I

ENDARASHA BOYS

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| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **T/L ACTIVITIES** | **T/L AIDS** | **REFERENCE** | **REMARKS** |
| **2** | 1 | 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 magnetsIdentifying 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 StringsRazor blade Stand | Comprehensive secondary physics students book 2 pages 1-2Comprehensive secondary physics teachers book 2 pages 1-5Secondary physics KLB students book 2 page Principles of physics (M.Nelkom) pages 442-443Golden tips physics page 126 |  |
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|  | 2-3 | Magnetism | Magnetism and magnetic materialsThe compass | By the end of the lesson, the learner should be able to:Identify magnetic and non-magnetic materialsConstruct simple compass | Observing attraction and repulsion of magnetsIdentifying the test for magnetic materials Describing natural and artificial materials Carrying out experiments to identify magnetic and non- magnetic materialsConstructing a simple compass | Magnets Nails Pins Wood Plastics Tins Spoons StringsRazor blade StandPin/screw Magnet Cork Glass topWater trough Piece of stiff paper Razor bladeGlue | Comprehensive secondary physics students book 2 pages 1-2Comprehensive secondary physics teachers book 2 pages 1-5Secondary physics KLB students book 2 page Principles of physics (M.Nelkom) pages 442-443Golden tips physics page 126Comprehensive secondary physics students book 2 pages 3-5Comprehensive secondary physics teachers book 2 pages 1-5Secondary physics KLB students book 2 page 5 Principles of physics (M.Nelkom) pages 151 Golden tips physics page 127 |  |
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|  | 4 | 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 topWater trough Piece of stiff paper Razor bladeGlue | Comprehensive secondary physics students book 2 pages 3-5Comprehensive secondary physics teachers book 2 pages 1-5Secondary physics KLB students book 2 page 5 Principles of physics (M.Nelkom) pages 151 Golden tips physics page 127 |  |
| **3** | 1 | 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 theoryBar magnets Iron fillings Test tubes Cork | Comprehensive secondary physics students book 2 pages 9-10Comprehensive secondary physics teachers book 2 pages 1-5Secondary physics KLB students book 2 page 17 Principles of physics (M.Nelkom) pages Golden tips physics page 127 |  |
| 2-3 | 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 magnetsState the logic law of magnetism | Investigating properties of magnetsStating the laws of magnetism | MagnetsCharts on properties Iron fillingsStrings Stand | Comprehensive secondary physics students book 2 pages 1-2Comprehensive secondary physics teachers book 2 pages 1-5Secondary physics KLB students book 2 page 1-4 Principles of physics (M.Nelkom) pages 149 Golden tips physics page 124 |  |
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|  | 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 Card board Sheet of papers | Comprehensive secondary physics students book 2 pages 3-5Comprehensive secondary physics teachers book 2 pages 1-5Secondary physics KLB students book 2 page 6-7 Principles of physics (M.Nelkom) pages 444 Golden tips physics page 124-125 |  |
| **4** | 1 | 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 inductionMagnetizing a steel bar by stroking single and double strikes Defining hard and soft magnets | Bar magnets Steel bars NailsIron bars | Comprehensive secondary physics students book 2 pages 6-7Comprehensive secondary physics teachers book 2 pages 1-5Secondary physics KLB students book 2 page 19-22Principles of physics (M.Nelkom) pages 441-442Golden tips physics page 125-126 |  |
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|  | 2-3 | 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 inductionMagnetizing a steel bar by stroking single and double strikes Defining hard and soft magnets | Bar magnets Steel bars NailsIron bars | Comprehensive secondary physics students book 2 pages 6-7Comprehensive secondary physics teachers book 2 pages 1-5Secondary physics KLB students book 2 page 19-22Principles of physics (M.Nelkom) pages 441-442Golden tips physics page 125-126 |  |
| 4 | 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 magnetExplaining how to care for magnetsCarrying out experiments to demagnetize and care for magnets | Battery/cell KeepersBar magnets Chart ondemagnetization and care for magnets | Comprehensive secondary physics students book 2 pages 8-9Comprehensive secondary physics teachers book 2 pages 1-5Secondary physics KLB students book 2 page 25-26Principles of physics (M.Nelkom) pages 442 Golden tips physics page 126-127 |  |
| **5** | MID TERM EXAMS AND BREAK |

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| **6** | 1 | 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 DiscussionsUsing magnets | Magnets Metallic barsNon-metallic bars | Comprehensive secondary physics students book 2 pages 9 Comprehensive secondary physics teachers book 2 pages 1-5Secondary physics KLB students book 2 page 27 Principles of physics (M.Nelkom) pages Golden tips physics page 127 |  |
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|  | 2-3 | Magnetism | Uses of magnets Making magnets by an electric current | By the end of the lesson, the learner should be able to:Describe the uses of magnetsMagnetize a material by an electric current | Describing uses of magnets DiscussionsUsing magnets Magnetizing a steel bar by an electric current | Magnets Metallic barsNon-metallic bars Insulated wireBattery cell Steel bar | Comprehensive secondary physics students book 2 pages 9 Comprehensive secondary physics teachers book 2 pages 1-5Secondary physics KLB students book 2 page 27 Principles of physics (M.Nelkom) pages Golden tips physics page 127Comprehensive secondary physics students book 2 pages 8Comprehensive secondary physics teachers book 2 pages 1-5Secondary physics KLB students book 2 page 23-24Principles of physics (M.Nelkom) pages 440Golden tips physics page 125-126 |  |
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|  | 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 8Comprehensive secondary physics teachers book 2 pages 1-5Secondary physics KLB students book 2 page 23-24Principles of physics (M.Nelkom) pages 440Golden tips physics page 125-126 |  |
| **7** | 1 | 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 Nailneedles | Comprehensive secondary physics students book 2 pages 13-15Comprehensive secondary physics teachers book 2 pages 6-11Secondary physics KLB students book 2 page 31-36Principles of physics (M.Nelkom) pages Golden tips physics page 3-4 |  |
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|  | 2-3 | Measurement Ii | The vernire calipersThe micrometer Screw gauge | By the end of the lesson, the learner should be able to:Measure length using vernire calipersMeasure length using the micrometer screw gauge | Measuring length and diameter of various objects using a venire calipersMeasuring small diameters and thickness using the screw gauge | Vernire calipers Circular containers NailneedlesMicrometer screw gaugeCharts on how to read the scale of a screw gaugeWires paper | Comprehensive secondary physics students book 2 pages 13-15Comprehensive secondary physics teachers book 2 pages 6-11Secondary physics KLB students book 2 page 31-36Principles of physics (M.Nelkom) pages Golden tips physics page 3-4Comprehensive secondary physics students book 2 pages 15-17Comprehensive secondary physics teachers book 2 pages 6-11Secondary physics KLB students book 2 page 36-40Principles of physics (M.Nelkom) pages Golden tips physics page 4-5 |  |
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|  | 4 | 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 numberWriting numbers in standard form |  | Comprehensive secondary physics students book 2 pages 17-19Comprehensive secondary physics teachers book 2 pages 6-11Secondary physics KLB students book 2 page 40-41Principles of physics (M.Nelkom) pages Golden tips physics page 8-9 |  |
| **8** | 1 | 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 WaterFloor or pollen grain strings | Comprehensive secondary physics students book 2 pages 6-11Comprehensive secondary physics teachers book 2 pages 19-21Secondary physics KLB students book 2 page 42-44Principles of physics (M.Nelkom) pages Golden tips physics page 9 |  |
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|  | 2-3 | 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 WaterFloor or pollen grain strings | Comprehensive secondary physics students book 2 pages 6-11Comprehensive secondary physics teachers book 2 pages 19-21Secondary physics KLB students book 2 page 42-44Principles of physics (M.Nelkom) pages Golden tips physics page 9 |  |
| 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 forceCalculating moment | Meter rule Knife edge StringsSpring balance Masses | Comprehensive secondary physics students book 2 pages 24 Comprehensive secondary physics teachers book 2 pages12-14Secondary physics KLB students book 2 page 50-52Principles of physics (M.Nelkom) pages Golden tips physics page 13 |  |
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| **9** | 1 | 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 StringsSpring balance Masses | Comprehensive secondary physics students book 2 pages 24 Comprehensive secondary physics teachers book 2 pages12-14Secondary physics KLB students book 2 page 53-56Principles of physics (M.Nelkom) pages Golden tips physics page 14-15 |  |
| 2-3 | The Turning Effects Of A Force Equilibrium And Centre Of Gravity | Principles of moments Equilibrium | By the end of the lesson, the learner should be able to:State and verify the principle of momentIdentify and explain the states of equilibrium | Stating the principle of moment of a force Calculating momentsIdentifying the states of equilibriumExplaining the conditions of equilibrium | Meter rule Knife edge StringsSpring balance MassesObjects with stable, unstable and neutral equilibrium | Comprehensive secondary physics students book 2 pages 24 Comprehensive secondary physics teachers book 2 pages12-14Secondary physics KLB students book 2 page 53-56Principles of physics (M.Nelkom) pages Golden tips physics page 14-15Comprehensive secondary physics students book 2 pages 33 Comprehensive secondary physics teachers book 2 pages15-17Secondary physics KLB students book 2 page 17-18Principles of physics (M.Nelkom) pages Golden tips physics page 15-16 |  |
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| **10** | END OF TERM EXAMS |

Dennis