Dennis

SCHEME OF WORK PHYSICS

FORM 2 2022 TERM I

ENDARASHA BOYS

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 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 126 |  |
|  | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **T/L ACTIVITIES** | **T/L AIDS** | **REFERENCE** | **REMARKS** |
|  | 2-3 | Magnetism | Magnetism and magnetic materials  The compass | By the end of the lesson, the learner should be able to:  Identify magnetic and non-magnetic materials  Construct simple compass | 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  Constructing a simple compass | Magnets Nails Pins Wood Plastics Tins Spoons Strings  Razor blade Stand  Pin/screw Magnet Cork Glass top  Water trough Piece of stiff paper Razor blade  Glue | 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 126  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 |  |
|  | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **T/L ACTIVITIES** | **T/L AIDS** | **REFERENCE** | **REMARKS** |
|  | 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 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** | 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 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 |  |
| 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 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 |  |
|  | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **T/L ACTIVITIES** | **T/L AIDS** | **REFERENCE** | **REMARKS** |
|  | 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-  5  Comprehensive secondary physics teachers book 2 pages 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 | 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 |  |
|  | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **T/L ACTIVITIES** | **T/L AIDS** | **REFERENCE** | **REMARKS** |
|  | 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 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 |  |
| 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 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 |  |
| **5** | MID TERM EXAMS AND BREAK | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **T/L ACTIVITIES** | **T/L AIDS** | **REFERENCE** | **REMARKS** |
| **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 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 |  |
|  | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **T/L ACTIVITIES** | **T/L AIDS** | **REFERENCE** | **REMARKS** |
|  | 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 magnets  Magnetize a material by an electric current | Describing uses of magnets Discussions  Using magnets Magnetizing a steel bar by an electric current | Magnets Metallic bars  Non-metallic bars Insulated wire  Battery cell Steel bar | 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  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 |  |
|  | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **T/L ACTIVITIES** | **T/L AIDS** | **REFERENCE** | **REMARKS** |
|  | 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 |  |
| **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 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 |  |
|  | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **T/L ACTIVITIES** | **T/L AIDS** | **REFERENCE** | **REMARKS** |
|  | 2-3 | Measurement Ii | The vernire calipers  The micrometer Screw gauge | By the end of the lesson, the learner should be able to:  Measure length using vernire calipers  Measure length using the micrometer screw gauge | Measuring length and diameter of various objects using a venire calipers  Measuring small diameters and thickness using the screw gauge | Vernire calipers Circular containers Nail  needles  Micrometer screw gauge  Charts on how to read the scale of a screw gauge  Wires paper | 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  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 |  |
|  | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **T/L ACTIVITIES** | **T/L AIDS** | **REFERENCE** | **REMARKS** |
|  | 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 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 |  |
| **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 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 |  |
|  | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **T/L ACTIVITIES** | **T/L AIDS** | **REFERENCE** | **REMARKS** |
|  | 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 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 |  |
| 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 |  |
|  | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **T/L ACTIVITIES** | **T/L AIDS** | **REFERENCE** | **REMARKS** |
| **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 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 |  |
| 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 moment  Identify and explain the states of equilibrium | Stating the principle of moment of a force Calculating moments  Identifying the states of equilibrium  Explaining the conditions of equilibrium | Meter rule Knife edge Strings  Spring balance Masses  Objects with stable, unstable and neutral equilibrium | 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  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 |  |
|  | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **T/L ACTIVITIES** | **T/L AIDS** | **REFERENCE** | **REMARKS** |
| **10** | END OF TERM EXAMS | | | | | | | |

Dennis