**SCIENCE SCHEMEE OF WORK**

**STANDARD 7, 2019**

**SCIENCE SCHEMES OF WORK STANDARD 7, 2019**

TERM 1

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| WEEK | LESSON | TOPIC/SUB TOPIC | OBJECTIVES | T/L ACTIVITIES | T/L RESOURCES | T/L AIDS | REMARK |
| 1 | 1 – 5 | Opening and Revisions | | | | | |
| 2 | 1 – 5 | HUMAN BODY  Circulatory system. | The pupils should be able to:  Identify parts of the circulatory systems.  Identify components of the blood and their functions.  Identify types of blood vessels and their functions.  Describe the structure and function of the heart. | Draw and discuss parts of the circulatory system.  Discuss components of blood and their functions.  Discuss types of blood vessels and their functions.  Explain the structure and function of the heart | Primary Science pupils book pg 1.  Understanding science pupils book pg 1 | Charts  Text book  Diagrams |  |
| 3 | 1 – 5 | HEALTH EDUCATION  Drug abuse.  Myths and misconceptions on HIV/AIDS | The learner should be able to:  Explain what a drug is.  Explain drug abuse and misuse.  Describe health and social effects of drug abuse.  Dispel myths and misconceptions on HIV/AIDS | Explain what drug is.  Explain drug misuse and abuse.  Discuss health and social effects of drug abuse.  Discuss myths and misconceptions on HIV/AIDS | Primary science pupils book pg 13  Understanding science pupils book pg 11 | Local environment  chart |  |
| 4 | 1 – 5 | ENVIRONMENT | The learner should be able to:  State the meaning of the environment.  Name the major components of the environment. | Explain the meaning of the environment.  Discuss major components of the environment. | Primary science pupils book pg 33  Understanding science pupils book pg 22 | Local environment. |  |
| 5 | Revisions and End of January exams | | | | | | |
| 6 | 1 – 5 | PLANTS  Interdependence between plants and animals.  Crop pests. | The learner should be able to:  Explain interdependence between plants  Explain interdependence between plants and animals.  Explain what food chain is.  Explain crop pests.  State crop pests, their effects and control measures | Explain interdependence between plants.  Discuss interdependence between plants and animals.  Explain food chain.  Explain crop pests.  Discuss crop pests their effects and control measures. | Primary science pupils book pg 42  Understanding pupils book pg 25 | Local environment. |  |
| 7 | Mid term exams | | | | | | |
| 8 | 1 – 5 | ANIMALS  Livestock parasites.  Human intestinal worms. | The pupils should be able to:  Name some external and internal parasites.  State the effects of parasites on livestock.  Control some livestock parasites.  Control some human intestinal worms. | Discuss some internal and external parasites.  Explain effects of parasites on livestock.  Discuss ways of controlling some livestock parasites and some human intestinal worms. | Primary science pg 67  Understanding science pg 38 | Animal  Charts  Local environment |  |
| 9 | 1 – 5 | WATER.  Water pollution.  Effects of water pollution.  Water conservation. | By the end of the lesson the learner should be able to:  State how water gets polluted.  Describe effects of water pollution.  Identify ways of controlling water pollution.  Describe ways of conserving water.  Appreciate importance of conserving water. | Discuss how water gets polluted.  Explain effects of water pollution.  Explain ways of controlling water pollution.  Discuss ways of conserving water. | Primary science.  Understanding science. | Water  Local environment. |  |
| 10 | 1 – 5 | SOIL  Soil fertility. | By the end of the topic, the learner should be able to:  Explain the meaning of fertilizers. | Explain the meaning of the fertilizers. Explain and classify fertilizers into straight & compound. | Primary science  Understanding science. | Soil fertilizers. |  |
|  |  |  | Classify fertilizers into straight and compound.  Identify different types of manure.  State the advantages and disadvantages of manures and fertilizers. | Explain and classify fertilizers into straight & compound  Discuss different types of manure.  Discuss advantages and disadvantages of manures and fertilizers. |  |  |  |
| 11 | 1 – 5 | ENERGY  Electricity. | By the end of the lesson the learner should be able:  Name sources of electricity.  Make a simple circuit.  Investigate good and poor conductors of electricity.  Identify electrical appliances in homes and their uses.  Describe safety measures when dealing with electricity.  Demonstrate safety measures when there is lightning. | Discuss sources of electricity.  Make a simple circuit.  Investigate good and poor conductors of electricity.  Discuss electrical appliances in homes and their uses.  Discuss safety measures when dealing with electricity.  Discuss safety measures when there is lightning. | Primary science  Understanding science. | Bulbs  Wires  Dry cells |  |
| 12 & 13 | Revisions and Preparations for End Term Exams | | | | | | |
| 14 | End Term 1 Exams and Closing | | | | | | |

TERM 2

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| WEEK | LESSON | TOPIC/SUB TOPIC | OBJECTIVES | T/L ACTIVITIES | T/L RESOURCE | | | REFERENCE | | REMARK | |
| 1 | Opening and Revisions | | | | | | | | | | |
| 2 | 1 – 5 | ANIMALS  Livestock parasite.  Human intestinal worms. | By the end o the lesson the learner should be able to:  Name some internal and external parasites.  State the effects of parasites on livestock.  Control some livestock parasites.  Control some human intestinal worms | Stating and naming some internal and external worms.  Naming the effects of parasites on livestock.  Stating the methods of controlling some livestock parasites  Stating some ways to control some human intestinal worms | A chart  Pictures on internal and external parasites  Some internal and external parasites | | | Understanding science pupils book 7 pg 38 – 44  Quick reading science book 7 pg 38 - 44 | |  | |
| 3 | 1 – 5 | WATER  Water pollution  Effects of water pollution  Water conservation | State how water gets polluted.  Describe effects of water pollution.  Identify ways of controlling water pollution.  Describe ways of conserving water  Appreciate the importance of conserving water. | State the meaning of water pollution and ways in which water is polluted.  Stating effects of water pollution.  Discuss ways controlling water pollution.  Stating ways of conserving water and discuss them | Water  Soil  A chart | | | Understanding science pupils book 7 pg 46 - 51  Quick reading science book 7 pg 46 - 51 | |  | |
| 4 | 1- 5 | SOIL  Soil fertility. | Explain the meaning of fertilizer  Classify fertilizers into straight and compound  Identify different type of manure.  State the advantages and disadvantages of using fertilizers and manure | Defining meaning of fertilizer. stating types of fertilizers  Identifying the different types of fertilizers.  Identifying the different types of manure.  Discussing the different advantages and disadvantages of manures and fertilizers.  Preparing a compound manure. | A chart  Manure  Artificial fertilizers  Green farmyard manure. | | Understanding science pupils book 7 pg 53 - 57  Quick reading science book 7 pg 54 – 57 | |  | |
| 5 and  6 | 1 – 5  1 – 5 | ENERGY  Electricity | Name sources of electricity  Make a simple circuit  Investigate good and poor conductors of electricity  Identify electrical appliances at home and their uses.  Describe safety measures when dealing with electricity.  Demonstrate safety measures when there is lightning. | Naming sources of electricity.  Making a simple. Investigating good and poor conductors of electricity.  Identifying electrical appliances in homes and their uses.  Describing safety measures when dealing with electricity and when there  is lightning | A chart  Wires  Batteries  Wood  Plastic  Metal  Paper  Bulbs | | Understanding science pupils book 7 pg 58 - 67  Quick reading science book 7 pg 59 - 68 | |  | |
| 7 | 1 – 5 | Revision and mid term exams | | | | | | | | |
| 8 | 1 – 5 | PROPERTIES OF MATTER.  Dissolving solids in water  Mixing liquids.  Magnet and non magnetic materials.  Separating mixtures | By the end of the lesson the learner should be able to:  Identify solids that dissolve and those that do not dissolve in water.  Identify liquids which mix and those that do not mix.  Identify magnetic and non magnetic materials.  Separate mixtures | Dissolving solids in water.  Mixing liquids  Identifying magnetic and non magnetic materials.  Separating mixtures. | A chart  Salt  Sugar  Water  Soil  Paraffin  Spirit  Oil  Iron fillings  Metals  Magnets  Wood  plastic  paper | Understanding science pupils book 7 pg 69 - 75  Quick reading science book 7 pg 71 – 77 | | |  | |
| 9 and 10 | 1 – 5  1 - 5 | MAKING WORK EASIER.  Friction  Parts of a lever. | Investigate friction.  State advantages and disadvantages of friction.  Demonstrate ways of reducing and increasing friction.  Identify positions of fulcrum, load and effort in different levers. | Defining friction.  Investigating and listing advantages and disadvantages of friction.  Demonstrating ways of reducing and increasing friction.  Identify positions of fulcrum, load and effort in different levers. | Chart.  Claw hammer.  Crow bar  Wheelbarrow  Spade  Oil grease.  Rollers | Understanding science pupils book 7 pg 76 – 85  Quick reading science book 7 pg 79 - 86 | | |  | |
| 11 &  12 | 1 – 5  1 – 5 | **REVISION**  PLANTS.  Interdependence between plants and animals.  Crop pests. | Explain interdependence between plants.  Explain interdependence between plants and animals.  Explain what a food chain is.  Explain meaning of crop pests.  Identify some crop pests, their effects and control measures. | Defining interdependence between plants.  Defining interdependence between plants and animals.  Defining a food chain and giving examples.  Discussing crop pests, their effects and control measures. | Food (different types.)  Animal waste  Branches.  Various crop pests.  Plants invaded by pests.  A chart. | Understanding science pupils book 7 pg 25 - 36  Quick reading science bk 7 pg 29 - 36 | | |  | |
| 13 | 1 – 5 | **REVISION**  ENVIRONMENT  Meaning of the environment  Components of the environment | State the meaning of the environment.  Name major components of the environment. | Defining environment  Stating and discussing the major components of the environment and their uses. | Water  Soil  Plants  Pictures of animals | Understanding science pupils book 7 pg 22 – 24  Quick reading science bk 7 pg 24 – 27 | | |  | |
| 14 | 1 – 5 | Revision and end term 11 exams | | | | | | | | |

TERM 3

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| WEEK | LESSON | TOPIC | | | SUB TOPIC | OBJECTIVES | | T/L ACTIVITIES | | | T/L AIDS | | REFFEENCES | REMARK |
| 1 | 1 – 5 | REVISION | | | | | | | | | | | | |
| 2 | 1 – 2 | ELECTRICITY | | | Sources of electricity. (static) | The learner to state any two sources of static electricity.  Define static electricity | | Observation.  Sampling  Experimentation answers | | | A plastic ruler  Small pieces of paper. | | Primary science pupils book 7 page 106 – 107  Science in Africa pupils book 7 |  |
|  | 3 – 4 | Electricity | | | Current electricity | The learner should be able to:  State any two sources of current electricity.  Define the term current electricity. | | Experimentation.  Answer  Observation | | | Car battery  Torch battery  Generators. | | Primary science pupils book 7 page 110 – 112  Science in action pupils book 7 |  |
|  | 5 | Electricity | | | Sources of current electricity.  (torch, battery) | The learner should be able to:  Name sources of current electricity.  Define the term current electricity. | | Discussion  Observation.  Question and answer  Explanation | | | Torch battery  A bulb | | Primary science pupils book 7 pg 112  Science in action pupils book 7 |  |
| 3 | 1 | Electricity. | | | Car battery | State the type of energy found in a car battery.  State uses of a car battery | | Discussion  Answers  Explanation  Questions | | | Car battery | | Primary science pupils book 7 pg 112  Science in action pupils book 7 |  |
|  | 2 | | Electricity | | Generators | State the type of energy found in generators.  Give any uses of generators. | | Discussion.  Explanation  Q/Answer | | | A generator | Primary science pupils book 7 pg 113  Science in action pupils book 7 | |  |
|  | 3 | | Electricity | | Bicycle dynamo | State the types of energy in a dynamo.  State the uses of a generator | | Discussion  Explanation.  Q/Answer | | | A bicycle dynamo | Primary science pupils book 7 pg 113  Science in action pupils book 7 | |  |
|  | 4 | | Electricity | | Hydroelectric petrol and diesel generators. | The learner to state how petrol and diesel generators operate | | Explanation  Demonstration  Observation | | | Pictures of generators. | Primary science pupils book 7 pg 113 – 114  Science in action pupils book 7 | |  |
|  | 5 | | Electricity | | Window driven solar energy geothermal | The learner to state how solar geothermal and wind driven generators operate. | | Q/Answer  Observation  Explanation | | | A solar panel  Pictures of a geothermal generator | Primary science pupils book 7 pg 114 - 115  Science in action pupils book 7 | |  |
| 4 | 1 | | Electricity | Simple electric circuit. | | | The learner to construct a simple electric circuit. | | Discussion  Q/Answers  Explanation | A bulb, dry cells, wires | | Primary science pupils book 115 – 117  Understanding science book 7 | |  |
|  | 2 | | Electricity. | Good and poor conductors of electricity. | | | The learner should be able to distinguish good conductors from poor conductors. | | Discussion  Q/Answer  Explanation. | Rubbers  Wires  Plastics  Dry cells  Bulbs etc | |  | |  |
| 5-7 | Revisions and Class work: In door and Out door | | Revisions and Class work: In door and Out door | Revisions and Class work: In door and Out door | | | The learner should be able to Revise and do Class work: In door and Out door | | Revisions and Class work: In door and Out door |  | | Primary science pupils book  Understanding science book | |  |
| 8 | Preparations for End Term Exams | | | | | | | | | | | | |  |
| 9 | End Term Exams and Closing | | | | | | | | | | | | |  |