**SCIENCE SCHEMEE OF WORK**

**STANDARD 7, 2019**

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

TERM 1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 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 BODYCirculatory 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  | ChartsText bookDiagrams |  |
| 3 | 1 – 5 | HEALTH EDUCATIONDrug 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 13Understanding science pupils book pg 11 | Local environmentchart |  |
| 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 33Understanding science pupils book pg 22 | Local environment. |  |
| 5 | Revisions and End of January exams |
| 6 | 1 – 5 | PLANTSInterdependence between plants and animals.Crop pests. | The learner should be able to:Explain interdependence between plantsExplain 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 42Understanding pupils book pg 25 | Local environment. |  |
| 7 | Mid term exams |
| 8 | 1 – 5 | ANIMALSLivestock 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 67Understanding science pg 38 | Animal ChartsLocal 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. | WaterLocal environment. |  |
| 10 | 1 – 5 | SOILSoil 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 scienceUnderstanding 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 & compoundDiscuss different types of manure.Discuss advantages and disadvantages of manures and fertilizers. |  |  |  |
| 11 | 1 – 5 | ENERGYElectricity. | 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 scienceUnderstanding science. | BulbsWiresDry cells |  |
| 12 & 13 | Revisions and Preparations for End Term Exams |
| 14 | End Term 1 Exams and Closing |

TERM 2

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| WEEK | LESSON | TOPIC/SUB TOPIC | OBJECTIVES | T/L ACTIVITIES | T/L RESOURCE | REFERENCE | REMARK |
| 1 | Opening and Revisions |
| 2 | 1 – 5 | ANIMALSLivestock 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 parasitesStating some ways to control some human intestinal worms | A chart Pictures on internal and external parasitesSome internal and external parasites | Understanding science pupils book 7 pg 38 – 44Quick reading science book 7 pg 38 - 44 |  |
| 3 | 1 – 5 | WATERWater pollutionEffects of water pollutionWater conservation | State how water gets polluted.Describe effects of water pollution.Identify ways of controlling water pollution.Describe ways of conserving waterAppreciate 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 | WaterSoilA chart | Understanding science pupils book 7 pg 46 - 51Quick reading science book 7 pg 46 - 51 |  |
| 4 | 1- 5 | SOILSoil fertility. | Explain the meaning of fertilizerClassify fertilizers into straight and compoundIdentify different type of manure.State the advantages and disadvantages of using fertilizers and manure | Defining meaning of fertilizer. stating types of fertilizersIdentifying 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 chartManureArtificial fertilizersGreen farmyard manure. | Understanding science pupils book 7 pg 53 - 57Quick reading science book 7 pg 54 – 57 |  |
| 5 and 6 | 1 – 51 – 5 | ENERGYElectricity | Name sources of electricity Make a simple circuitInvestigate good and poor conductors of electricityIdentify 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 chartWiresBatteriesWood PlasticMetalPaperBulbs | Understanding science pupils book 7 pg 58 - 67Quick reading science book 7 pg 59 - 68 |  |
| 7 | 1 – 5 | Revision and mid term exams |
| 8 | 1 – 5 | PROPERTIES OF MATTER.Dissolving solids in waterMixing 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 chartSaltSugarWaterSoilParaffinSpiritOilIron fillingsMetalsMagnetsWood plasticpaper | Understanding science pupils book 7 pg 69 - 75Quick reading science book 7 pg 71 – 77 |  |
| 9 and 10 | 1 – 51 - 5 | MAKING WORK EASIER.FrictionParts 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 barWheelbarrowSpadeOil grease.Rollers | Understanding science pupils book 7 pg 76 – 85Quick reading science book 7 pg 79 - 86 |  |
| 11 & 12 | 1 – 51 – 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 wasteBranches.Various crop pests.Plants invaded by pests.A chart. | Understanding science pupils book 7 pg 25 - 36Quick reading science bk 7 pg 29 - 36 |  |
| 13 | 1 – 5 | **REVISION**ENVIRONMENTMeaning of the environmentComponents of the environment | State the meaning of the environment.Name major components of the environment. | Defining environmentStating and discussing the major components of the environment and their uses. | WaterSoilPlantsPictures of animals | Understanding science pupils book 7 pg 22 – 24Quick reading science bk 7 pg 24 – 27 |  |
| 14 | 1 – 5 | Revision and end term 11 exams |

TERM 3

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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.SamplingExperimentation answers | A plastic rulerSmall pieces of paper. | Primary science pupils book 7 page 106 – 107Science 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.AnswerObservation | Car batteryTorch batteryGenerators. | Primary science pupils book 7 page 110 – 112Science 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. | DiscussionObservation.Question and answerExplanation | Torch batteryA bulb | Primary science pupils book 7 pg 112Science 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 | DiscussionAnswers ExplanationQuestions | Car battery | Primary science pupils book 7 pg 112Science in action pupils book 7 |  |
|  | 2 | Electricity | Generators | State the type of energy found in generators.Give any uses of generators. | Discussion.ExplanationQ/Answer | A generator | Primary science pupils book 7 pg 113Science in action pupils book 7 |  |
|  | 3 | Electricity |  Bicycle dynamo | State the types of energy in a dynamo.State the uses of a generator | DiscussionExplanation.Q/Answer | A bicycle dynamo | Primary science pupils book 7 pg 113Science in action pupils book 7 |  |
|  | 4 | Electricity | Hydroelectric petrol and diesel generators. | The learner to state how petrol and diesel generators operate | ExplanationDemonstrationObservation | Pictures of generators. | Primary science pupils book 7 pg 113 – 114Science 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/AnswerObservationExplanation | A solar panelPictures of a geothermal generator | Primary science pupils book 7 pg 114 - 115Science in action pupils book 7 |  |
| 4 | 1 | Electricity | Simple electric circuit. | The learner to construct a simple electric circuit. | DiscussionQ/AnswersExplanation | A bulb, dry cells, wires | Primary science pupils book 115 – 117Understanding 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/AnswerExplanation. | RubbersWiresPlasticsDry cellsBulbs 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 |  |