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| SCIENCE SCHEME FOR PRIMARY SIX TERM II | | | | | | | | | | | |
| **WK** | **PD** | **THEME** | **SUB-TOPIC** | **SUBJECT COMPETENCES** | **LANGUAGE**  **COMPETENCES CONTENT** | | **METHODS** | **LIFE SKILL** | **L AIDS** | **Suggested activities** | **REF** |
| 1 | 2 | The world of living things | Classification of plants | * The learner classifies plant in to flowering and non flowering plants names parts of a flowering | The leaner names classes of plants  -Describes flowering plants | * Flowering plants * Defines flowering plants are plants which bear flowers and reproduce by means of seeds. * Structure of a flowering plant * -Leaves , flower , stems , fruits, seeds, roots function of each part. | Discussion  Observation | Effective communication  Care  love | flowering plant.  -A chart showing a flowering plant | * Observing different flowering plants * Drawing and naming parts of a plant * States functions of each part | Fountain integrated SciBk 6 Pg 162 |
| 2 | 1 |  | Roots | * Learners draws different types of roots * Gives examples of plants with such roots | Learners outlines functions of roots to a plant  -Names different types of roots | **Roots**   * Functions of roofs to plants uses of roots to animals   **Types of roots**   * Primary roots * Tap roots * Fibrous roots * Secondary roots * Adventitious roots * Clasping roots * Prop roots * Buttress roots * Storage root | * Guided discussion * Question and answer * observation | * problem solving * critical thinking * care | -Different roots  Charts showing roots | * Sorting samples of roots * Drawing roots * Naming | Baroque intscibk 6 |
| 2 | 2 | The world of living things | Classification of plants (stem) | * Learner classifies plants into groups of flowering and non flowering plants * Functions of stems | * The learner names the functions of stems * Spells scientific words correctly acts out a dialogue about types of stems. | * Stems * Functions of stems * Types of stems * Upright stems (erect) stems * Underground stems * Stem tubers * Rhizomes * Bulbs * Corms * Examples of each | * Guided discovery * Brain storming | * Problem solving * Creative thinking | * Onions * Ginger * Different stems | * Drawing stems * Naming stem | * Fountain integrated SciBkPg 166 |
| 2 | 3 |  | Leaves | * The learner names the parts of a leaf * Describes the functions of leaves * Uses * Characteristics to prepare simple classification of leaves | * The learner writes words about parts of leaves * Draws and labels parts of a leaf. * The learner writes words about parts of leaves * Reads words and sentences , stories about leaves | * Leaves * **Parts of a leaf** * Functions of leaves * Leaf venation * Net work leaf venation * Parallel leaf venation * **Types of leaves** * Compound leaves * Simple leaves * Examples of two types of leaves | * Guided discovery * Question and answer | * Effective communication * Fluency | * Real leaves * Chart showing leaves | * Drawing leaves * Naming leaves * Collecting leaves from environment | Fountain integrated sci BK 6 Pg 168 - 171 |
| 2 | 4 |  | Photosynthesis | * The learner * Describes photosynthesis * Names the conditions and raw materials for plant to carry out photosynthesis | * Writes description of photosynthesis * Spells and writes words about photosynthesis | * Photosynthesis * Dfn: * Requirements * Raw materials * Conditions * By products * How leaves are adapted to photosynthesis * Testing for starch | * Conducted class discussion | * Appreciation * Responsibility * care | * Iodine solution * Cassava * Potato leaves | * Carry out experiment to test for starch | Fountain integrated Sci BK 6 Pg 171 – 173 |
| 2 | 5 |  | Transpiration | * The learner * Describes transpiration * Name the importance of transpiration to plants | * The learner * Reads words, sentences and stories about transpiration | * Transpiration * Dfn: * Importance of transpiration * Factors which affects the rate of transpiration * Temperature * Water supply * Humidity * Speed of wind * Surface area of a leaf. | * Guided discussion * experimentation | * critical thinking * love | * Polythene paper * Rubber band * Plant | * Carrying out an experiment to test transpiration in the plants environment |  |
| 2 | 6 |  | Flowers | * Learner draws the flower * They name the parts of the flower | **Dfn**   * Pistil * Stamen * Ovules * Corolla * Calyx | * Flowers * Dfn * Structure of a flower * Reproductive parts of a flower   **Uses of flowers to**   * Man * Plants | * Guided discovery * Question and answer | * Problem solving * care | * A chart showing a flower * A flower | * Drawing * Naming parts of a flower | * Fountain integrated Sci BK 6 Pg 176 |
| 3 | 1 |  | Pollination and fertilization | * The learner * Defines the term pollination * Lists down agents of pollination mentions types of pollination * Explains the characteristics of * Wind and insect pollinated flower * Describes the process of fertilisation | * The learner * Defines * Pollination * Describes agents of pollination * Reads words and stories about pollination | * Pollination and fertilization * Definition of pollination * **Agent of pollination** * Wind * Insects * Birds * Water * **Types of pollination** * Self pollination * Definition * Characteristics of cross pollinated flowers * Characteristics of wind pollinated flowers. * Fertilization | * Guided discussion * Guided discovery * Question and answer | * Critical thinking * Decision making * Love * care | * Flowers | * Describes * Characteristics of wind and insect pollinated flowers * Uses characteristics to classify different types of pollination * Audio visual presentation | Tropical Bio Intro to Bio MK SciBk 6  Comprehensive  SciBk 6 |
| 3 | 2 |  | Fruits | * The learner * Defines a fruits * Mentions types of fruits * Gives and identify types of fruits | * The learner names types of fruits * Characteristics of each type | * Definition * Characteristics of fruits * Types of fruits * Succulent fruits | * Explanation * Observation * Brain storming | * Critical thinking * Love care | * Fruits and seeds * Grounding fruits | * Drawing fruits and naming different parts classifying * Drupes * Dehiscent fruits * Characteristics of each types and example importance of fruits | * Comp scibk 6 |
| 3 | 3 |  | Seed dispersal | * The learner * Describes seed dispersal * Identifies agents of dispersal * Names the characteristics of seeds dispersed by various | * The learner * Reads words , sentences and stories about seed dispersal * States the ways seeds are dispersed * State the characteristics of the various seeds | **Seed dispersal**  **Dfn**   * Seed dispersal * Importance of seed dispersal eg. * Water * Wind * Animals * Self dispersal * Characteristics of seeds dispersed by * Water * Wind * Animals * Self dispersal | * Guided discovery * Question and answer | * Effective communication * Critical thinking * care | * Seeds * Charts * Text books | * Observe different plants in the environment * Carrying out a simple study to identify different seeds * Describing methods of seed dispersal | * Understanding intscibk 6 |
| 3 | 4 |  | Plant propagation | * The learner describes plants propagation * Identifies methods of plant propagation * Participates in propagation of some plants | * The learner writes words about propagation * Reads words sentences and stories about propagation | * Meaning of propagation * Methoids of plants propagation * By seeds * By vegetative propagation seeds * A seed is a mature ovule * Groups of seeds * Monocotyledonous seeds * Monocotyledonous | * Observation * Discussion * Question and answer | * Critical thinking problem solving | * Stems * Bulbs * Seeds * Old tins * Growing plants | * Observe different seeds * Carrying out experiment planting seeds * Identifying characteristics of monocots and dicots | Fountain intergrated Sci Bk 6 Pg 67 and Supplementary Sci Std 8  MK |
| 3 | 5 |  | Germination | * The learner describes germination * Names the requirements of seed germination * Identify types of seed germination | * The learner writes simple words about germination * Reads words sentences and stories about seed germination * Draw and labels different methods of plant propagation | **Germination**  **Dfn**   * **Types of germination** * Epigeal germination * Hypogeal * Epigeal germination * Meaning of epigeal seeds which under goepigeal.   **Hypogeal**   * Examples of seeds which undergo hypogeal germination conditions for germination. Moisture , oxygen , warmth * Differentiate monocots and dicots | * Observation * Discussion | * Critical thinking * Effect communication | * Germinating seeds | * Planting different seeds and observing them * Caring for the plants | * Comp intscibk 6 |
| 3 | 6 |  | Tropism | * Defines tropism * Identify types of tropism * Draws diagrams to show experiment on tropism | * Spells * Write * Pronounces * Use words in sentences correctly | **Tropism**  Is the response of a plant towards a given stimulus.  Types of tropism   * Photo tropism * Geo tropism * Hydro tropism * Thigmo tropism * Chemo tropism | * Explanation * Brain storming | * Problem solving * care | * audio visual | * Defining each type of tropism | * Comp intscibk 6 |
| 4 | 1 |  | Propagation | * Describes plant propagation defines propagation correctly * Identify types of propagation | * Writes simples description of some common plants | * Types of vegetative propagation * Natural * Artificial * Natural / vegetative propagation * Uses of rhizomes leaves , seeds , corn , stem, tubers , suckers methods of artificial vegetative propagation * Stem cutting grafting , layering * Budding marcotting * Advantages of vegetative propagation * Importance of plants | * Guided discussion * Guided discovery | * Critical thinking * Effective communication * Love * Care | * Seeds * Leaves * Stems * Sucker etc | * Planting various crops | * Comp intscibk 6 |
| 4 | 2 |  | Non – flowering plants | * The learner names examples of non – flowering plants * Uses characteristics to prepare simple classification of non – flowering plants | * Describe non flowering plants * Read words about non – flwering plants * Draw and label non – flowering plants | * Dfn of non – flowering plants * Spore producing plants * Ferns , mosses , liver worts * Reasons why regarded as plants * Have simple leaves , stems and roots * Structure of each * Conifers produced by means of seesds by do not bear flowers   **Examples**   * Pine , cederfir, podo , gingko * Economic uses of conifers and general uses | * Explanation * Discussion | * Critical thinking * Effective communication | * Mosses * Ferns | * Discussing about non – flowering plants * Observing non – flowering plants * Discussing example of non – flowering plants | Baroque intscibk 6 |
| 4 | 3 | Sci in Human activities and occupation | Keeping cattle | * The learner * Identifies the different reasons for keeping cattle * Identifies the different breeds of cattle * Names the characteristics of each breed * Identifies the difference between the different breeds * Mention the advantages and disadvantages of each breed | * The learner names the reasons for keeping cattle * Names the different breeds of cattle * Acts out advantages about and disadvantages of exotic and local breeds. | * **Cattle** * **Dfn** * Reasons for keeping cattle * External features of a cow * Breeds of cattle * Local / indigenous cattle * Exotic breed * Characteristics of each breed differences between breeds of cattle (Local and exotic ) * Advantages of local breeds over breeds. * Advantages of exotic breeds over local breeds | * Conducted class discussion * Guided discovery * Question and answer | * Critical thinking * Effective communication * Love * Care | * Real cattle | * Observe different types of cattle types of cattle on a farm * Discussing different breeds of cattle * Attending operation of cattle of cattle on a farm names , care feeding and their diseases | * Comp scibk 6 * Baroque intscibk 6 |
| 4 | 4 |  | Types of cattle | * The learner identifies the different breeds of cattle * Identifies different breeds of cattle | * The learners acts out adialogue about external features of a bull and a cow | * Types of cattle * Dairy cattle * Beef cattle * Dual purpose cattle * Work type of cattle characteristics , shape and example of each breed * Difference between dairy and beef cattle | * Guided discovery * Brain storming | * Problem solving | * Real cattle * Charts showing cattle | * Drawing different types / shapes of cattle | * Comp intscibk 6 |
| 4 | 5 |  | Reproduction in cattle | * The learner * Reads words sentences and stories about mating , insemination , artificial insemination | * The reproductive organs   a)Female  b) Male reproductive organ.  Parts and functions  Reproduction in cattle   * Heat in cattle * Mating in cattle.   a)Pasture mating  b)Hand mating   * Insemination Advantages and disadvantages of each type of insemination | * Naming different parts of the reproductive system in cattle | * Discussion * Explanation * Question and answer | * Critical thinking * Problem solving * Love * care | * chart   of the reproductive systems of cattle | * Charts * Text books | * Comp intscibk 6 |
| 4 | 6 |  | Calf management | * Learner * States different ways of animal , identification | * Reads words sentences and stories about mating gestation period and calving in cattle. | * Calf management * Feeding  1. Colostrums and its advantages 2. Farm practices eg numbering , dehorning , disbudding , castration , deworming , spraying , dipping and removal of extra teats | * Conducted class discussion | * Effective communication | * A farm (real life situation) | * Discussing ways of identifying animals | * Comp scibk 6 |
| 4 | 7 |  | Breeding in cattle | * Gives examples of breeds of cattle | * Dfn * Different types of breeding | Breeding in cattle  Types of breeding   * Inbreeding * Cross breeding * Out breeding * Line breeding | * Explanation * Guided discovery | * Problem solving | * A cattle farm | * Stating example of breeds | * do |
| 5 | 1 |  | Cattle management | List different systems of grazing cattle | * Acts a dialogue about systems of grazing cattle | * Cattle management (cave) * Feeding   a)Types of feeds  b) Systems of grazing cattle  c)Tettering  d)Strip grazing  e) Herding (free range)  f) Digestive system of a cow | * Conducted class discussion * Guided discovery * Question and answer | * Critcal thinking * Effective communication * Love * Care | * A chart showing the digestive system of a cow | * Drawing the digestive system of a cow | * Understanding intscibk 6 |
|  | 2 |  | Cattle management | * Housing and fencing in cattle | * The learner * Reads words * Housing * Fencing * Kraal * Byer | * Housing   a) Importantce of housing cattle  b)Types of cattle houses.  Fence  Importance of fencing  b)Types of fences | * Discussion * Brain stormiest * Guided discovery | * Effective communication * Fluency * Care | * A farm | * Observing different milking process * Listing types of fences , stating importances of housing cattle | Fountain   * IntergratedSci BK 6 Pg 67 – 76 |
|  | 3 |  | Cattle produces | * The learner * States methods of pursing cattle products (Milk , meat, hides ) | * The learner * Acts out a dialogue on how milking is done | * Milk and milk products * Measuring of milking * Methods of milking   a)Handing milking  b)Machine milking preservation of milk products  importance of lacto meter and strip cup  Other cattle products   * Beef – cow during and urine * Horns blood hooves * Preservation of beef * Preparation of hides * Wet - salting * Suspension drying * Marketing cattle products | * Guided discussion * Guided discovery   Question and answer | * Critical thinking * Problem solving * Love | * Real milk products | * Listing cattle products * Stating methods of preservation of cattel products | * Comp bk 6 |
|  | 4  &  5 |  | Cattle parasites and diseases | * Identify and name the different diseases of cattle. * Describes the causes signs and symptoms cattle diseases * Mention the prevention control and treatment of the cattle diseases | * Names the diseases of cattle according to causes * Acts out a dialogue about cattle diseases * Spell the diseases of cattle and write them correctly | * Cattle diseases according to their causes (organisms)   a)Bacterial diseases  b) Viral diseases  **signs of sickness in animals.**   * Transmission * Signs of good health in animals * Cattle diseases   a)Protozoa diseases eg East coast fever (ECF)   * Anaplasmosis * Heart water * Trypanosomiasis   Signs of the above and diseases   * Symptoms of diseases prevention , control and treatment   b) Bacterial diseases   * Anthrax * Brucellosis * Calf scour etc | * Conducted class discussion * Explanation * Question and answer | * Effective communication * Problem solving * Care * responsibility | * Audio visual presentation on cattle parasites | * Preparing a visit to a farm to write up on cattle diseases. * Discussing ways of stating alive stock farm * Carrying out activities which care and protect domestic animal | * Baroque intsci |
|  | 6 |  | Cattle keeping | * Identify the cattle diseases caused by virus * Spell and write the diseases * Name the cattle diseases caused by parasites. * Identify and state ways of control | * Reads words stories and sentences about cattle diseases * Name and correctly spell the cattle diseases * Write words about cattle diseases * Act out a dialogue about cattle diseases | * **Viral diseases** * Foot and mouth disease * Rinder pest other cattle diseases * Milk fever bloat * Mode of transmission   **Signs of the disease**   * Symptoms of the disease * Prevention and control of each disease   **Cattle parasites**   * Meaning of cattle parasites * Dangers of cattle   **Types of parasites**   * Ways of controlling different parasites * Farm records * Meaning , importance and types of farm records | * Guided discussion * Brain stormiest * Guided discovery | * Critical thinking * Problem solving * Care | * Real cattle | * Visiting a farm and identifying the sick animals | * Comp intsci |
| 7 | 1 |  | Cattle keeping | * The learner describes the records kept on a farm * Identify the importance of the farm records | * Name different records kept on a farm | * Types of records * Health , labour, records, marking records, field records, filed records, inventories, dairy recorded * Meaning of each of the above records. * Reasons for keeping such a record on alive stock | * Conducted class discussion * Brain storming | * Problem solving * Decision making | * Charts pupils text books | * Stating the importance of various records | * Comp scibk 6 |
|  | 2 |  | Name the requirements for starting live stock farm | * Reads and spells * Capital * Labour * Machinery | * Requirements of starting alive stock farm * Factors to consider before starting alive stock farm * Land , labour , capital ready market , management t , machinery etc * Meaning of each and importance * How some of the above can be obtained | * Discussion on ways of starting a farm | * Guided discussion * Explanation * Question and answer | * Critical thinking * Effective communication | * Out of class lesson | * Stating factors considered when starting a farm | Comp intscibk 6 |
|  | 3  &  4 | The environment | Resources in the environment | * The learner * Identifies resources from living and non living things * Lists different types of rocks | * The learner * Names resources * Describes living and non livingthings as resources | * **Resources** * **Dfn** * Ways of getting resources * Resources from non – living things such as soil, water, air and wind, sun, rock and minerals. * **Types of rocks.** * Igneous rocks * Metamorphic rocks * Sedimentary rocks * Fossils and uses * **Importance of rocks** * Alloys and reasons for making them * Examples of alloys * Manganese steel * Nick steel * Stain less steel * Cabalt steel | * Discussion * Explanation * Question and answer | * Critical thinking * Effective communication * Love * Appreciation | * rocks | * Observing things around us which are useful resource * Discussing ways of proper harvesting of resource | * Understanding intsci * Comp scibk 6 |
|  | 5 |  | Mentions resources got from plants and animals | * Names different fuels | * Fuels * Charcoal , fire wood, oil coal , resource from living things * Plants eg medicine , food , fibres * Animals eg wool , silk , food , honey , horns etc * Animals also used to do work eg carrying ploughing transport | * Discussing uses of different fuels | * Guided discovery * Guided discussion * Question and answer | * Critical thinking * Problem solving * Care | * Charcoal * Firewood * Oil | * Stating the uses of different fuels | Comp scibk 6 |
|  | 6 |  | Conservation of resources | * The learner participates in different ways of conserving environment | * Writes ways of caring from animal resources | * Conservation meaning of conservation * Reasons for conservation * Once over used resources become extinct or endangered * For future generations to see * Protect the environment * Non renewable resources by using 5R’s. | * Guided discussion * Brain storming | * Effective communication * Problem solving * care |  | * Discussing ways of caring and conserving resource * Practical preparing campaign message for sustainable use of resource | Comp scibk 6 |
| 8 | 1 |  | Conservation of resources | * States the ways of conserving resources | * Reads spells * Recycle * Reject * conservation | * Reducing , rejecting , recycling * B) conservation of renewable resources * Replacing the used ones * Reserving natural vegetation * Use of wind lie conservation | * Conducted class discussion * Question and answer | * Critical thinking * Conservation * care | * polythene * plastic tins | * stating ways of conserving resources | Comp scibk 6 |
|  | 2 |  | Harvesting of resources | * Outlines ways of controlling degradation of resources | * Gives different methods of harvesting resources | * Harvesting of resources * Meaning of the term harvesting * Proper harvesting and using of resources * Importance of harvesting | * Guided discussion | * Critical thinking |  | * Find out from community how people use the available resource | Comp scibk 6 |
|  | 3 |  | The human body | * Respiratory system | * The learner * Names respiratory organs | * Respiratory system * Meaning of respiration * Products of respiration * Respiratory organs * Breathing * Types of breathing * Respiratory system. | * Discussion * Explanation * Question and answer | * Self-awareness * Critical thinking * love | * a chart of the respiratory tract | * Observing models of respiratory organs * Carrying out an experiment to illustrate breathing in and out. | Baroque intscibk 6 |
|  | 4 |  | Respiratory tract | * Demonstrates an experiment on human respiration | * Listens to stories about breathing and respiratory | * Functions of each part of the system * Nose * Epiglottis * Trachea * Bronchus * Lungs * Alveoli (Air Sacs) * Adaptabilities of air sacs | * Conducted class discussion * Question and answer | * Articulation * Self-awareness * love | * Real lungs of a cow * Audio visual on * Lungs | * Naming and giving functions of parts of the respiratory tract | * Mk intscibk 6 |
|  | 5 |  | Diseases and disorders of the respiratory system | * Identities diseases and disorders of respiratory system | * Reads and spells * Pertussis * Diphtheria * Tuberculosis * influenza | * Diseases of respiratory system infectious respiratory diseases * Tuberculosis * Influenza * Diphtheria * Pneumonia * Whooping cough * Causes of each of the above disease * Prevention and control of each disease | * Conducted class discussion * Question and answer | * Critical thinking * Problem solving | * Real lungs * Chart showing lungs | * Listing diseases of the respiratory system | * Mk intscibk 6 |
|  | 6 | The human body | Diseases of the respiratory system | * Name the non-infectious diseases * Identify the causes of respiratory diseases * Describes the conditions that lead to noninfectious respiratory diseases | * Spells and writes words about non infectious diseases * Reading words, stories and sentences about noninfectious respiratory diseases | * Non – infectious respiratory diseases. * Bronchitis * Emphysema * Asthma * Lung cancer * Conditions that worsen the above diseases * Disorders of the respiratory system * Choking * Ways of keeping the system in a healthy conditions * Regular physical body exercises * Routine medical check – ups * Avoiding smoking | * Guided discussion * Explanation * Brain storming | * Effective communication * Self-awareness * Problem solving * Care | * Text book teaching | * Observing model of the respiratory organs * Carrying out experiment to illustrate breathing and out in relation to food and oxygen * Discussing diseases disorders * Listening talks from resource persons | Baroque intscibk 6 |