**SCHEME OF WORK FOR P.4 SCIENCE TERM I**

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| **WK** | **PD** | **THEME** | **SUB-THEME** | **CONTENT** | **COMPETENCES** | **METHODS** | **ACTIVITY** | **LIFE SKILLS AND VALUES** | **INSTRUCTIONAL MATERIALS** | **REF** |
| **1** | **1** | **WORLD OF LIVING THINGS**  **WORLD OF LIVING THINGS** | **PLANT LIFE**  **PLANT LIFE** | **Types of plants**   * Flowering plants * Non flowering plants.   **Flowering plants**   * Definition. * Examples of flowering plants * Parts of a flowering plant. * Functions of each part. * Systems of a flowering plant   **Main parts of a flowering plant**   1. Leaves   - Structure  - Uses of leaves.  - Types of leaves.  - Leaf venation  **Process in leaves**   * Photosynthesis * Transpiration  1. **Stems**   - Types of stems.  - Function of the stem.  - Ways (methods) how weak stems  climb others.   1. **Roots**   - Describe roots.  - Functions of roots.  - Types of roots.   1. **Flowers**   - Definition  **-** The structure  - Functions of parts of a  flower.  - Uses of a flower to man  and plants.  **Pollination**   * Definition. * Types of pollination. * Agents of pollination. * Characteristics of wind and insect pollinated flowers.   **Fertilization**   * Definition. * Where it takes place in a flower. * Reproductive parts of a flower.   \*Pistil  \*stamen  **Seeds**   * Definition * Structure of seeds * Types / classes / groups of seeds. * Functions of seeds. * Difference between a seed and a fruit.   **Germination**   * Definition * Types of germination. * Conditions necessary for germination. | **Language competence**  The learner:   * Spells the words correctly. * Pronounce the given words correctly.   Subject competences  The learner:   * States the types of plants. * Name the parts of a flowering plant. * Discusses the functions of parts of a flowering plant.   **Subject competences**  The learner:   * States the type of stems * Describes the functions of stems and roots. * States the uses of flowers to man and plants to plants and man   **Language competence**  The learner:-   * Pronounces the words correctly. * Spells the given words correctly.   **Subject competences**  The learner:   * Defines fertilization. * Identifies the reproductive parts of a flower. * Draws different structures of flowers * Identifies the male and female parts of a flower * Defines what a flower is   **Language competences**  The learner:   * Pronounces the given words correctly. * Spells’ and writes the words correctly. * Make correct sentences using the given words. | -Guided discovery  -Discussion  -Demonstration  -Question and answer.  -Explanation  - Observation | -Note taking  -Drawing  -Naming | Critical thinking.  Problem solving.  Decision making.  Effective communication  Appreciation | * Prepared chart. * Leaves. * flowers | Comp. Science Pupils book 4.  MK integrated scie pupils bk 4  Mk intergrated Pri Sci BK 4 Pg 7 - 8 |
|  |  | **WORLD OF LIVING THINGS** | **GROWING CROPS** | **Crops**   * Definition * Common crops grown   \*Maize  \*Sorghum  \*Peas, etc  **Groups of crops**   * Perennial crops. * Annual crops. * Definition and examples of the above groups of crops.   **Garden tools**   * Examples * Uses of each garden tool. * Caring for the garden tools.   **Crop growing practices**  **Land preparation**   * Tools used. * Activities involved in land preparation. * When land is prepared (season)   **Planting materials selection.**   * Why it is done? * Qualities of a good planting material (viable seeds) * How different crops are planted (propagation)   **Planting**   * Methods / ways of planting. * Description of the methods. * Advantages and disadvantages of each method. | **Subject competences**  The learner:-   * Identifies common crops grown. * States the groups of crops and explains each. * Identifies garden tools and their uses.   **Language competences.**  The learner:   * Spells, pronounce, reads and write given words correctly.   **Subject competences**  The learner:-   * Identifies tools used in land preparation. * Describes how different crops are propagated or planted. * Identifies methods of planting.   **Language competences**  The learner:-   * Pronounces, spells, reads, writes and makes sentences using the given words. | -Question and answer.  -Discovery  -Inquiry  Demonstration  Observation | -Answering question  -Writing  -Demonstration | -Awareness  -Creative thinking  -Care  Responsibility | * Real objects (plants) * A chart with garden tools. |  |
|  |  | **WORLD OF LIVING THINGS** | **GROWING CROPS** | **Nursery bed**   * Definition * Crops first planted in a nursery bed. * Define transplanting. * Advantages and disadvantages of a nursery bed. * Hardening off   **Caring for crops**   * Weeding   \*Definition  \*Examples of weeds  \*Importance  \*Dangers   * Manure * Watering   **Pruning**   * Definition * Tools * Advantages and disadvantages.   **Thinning**   * Definition * Advantages.   **Mulching**   * Definition * Examples of mulches. * Advantages and disadvantages of mulching. * Plant training * Transplanting * Manuring | **Subject competences**  The learner:   * Defines a nursery bed. * Identifies crops first planted in a nursery bed. * Discusses ways of caring for crops.   **Language competences**  The learner:-   * Reads and writes the words. * Makes correct sentences using the given words. | Discussion  Question and answer.  Explanation |  |  |  |  |
|  |  | **WORLD OF LIVING THINGS** | **GROWING CROPS** | * Staking * Gap fitting * **Pests and disease control** * Definition of pests. * Examples of pests. * Effects of pests and diseases. * Diseases of some crops. * Signs of diseases. * Ways of controlling pests and diseases to plants * **Harvesting** * Definition * When to harvest and why? * Tools used in harvesting. * **Food preservation** * Definition * Methods of preserving food. * Reasons for preserving food * **Storage** * Examples of storage pests. * Types of stores. * Qualities of a good store. | **Subject competences**  The learner:-   * Defines a pest. * Gives examples of pests. * Discusses ways of controlling pests and disease.   **Language competences**  The learner:   * Pronounces, spells, reads the given words correctly.   **Subject competences**  The learner:-   * Identifies examples of storage pests. * States the types of stores. * States reason for preserving food.   **Language competences**  The learner:-   * Pronounces, spells the words correctly. | Discussion.  Explanation. | Defining.  Writing.  Reading | Responsibility  Concern.  Honesty.  Care |  |  |
|  |  | **OUR ENVIRONMENT** | **Weather changes around us.** | * Definition of weather and climate * Types of weather. * Elements of weather / factors * Weather struments * Structures of weather instruments. | **Subjects**  The learner:-   * Describes the changes in weather. * Makes accurate measurements of rainfall. * Uses thermometer to measure temperature. | -Group work.  -Guided discovery.  -Question and answer.  -Guided discussion. | Answering both oral and written questions. | -Effective communication  -Critical thinking  -Creative thinking.  -Problem solving. | Weather chart.  Clinical thermometer  A chart showing clinical thermometer. | Comprehensive book four pg.  Mk.scie Bk 4  Integrated Bk. 4. |
|  |  | **OUR ENVIRONMENT** | **Weather changes around us.** | .**Types of rainfall.**   * Formation of rain/ water cycle * Advantages of rain and disadvantages.   **Sunshine**   * Advantages and dangers of sunshine.   **Cloud cover**   * Types of clouds and their characteristics. * Advantages of clouds.   **Wind**   * Defnition. * Instrument used to measure. * Advantages of wind.   **Humidity:**   * Definition. * Instrument used to measure. * Advantages of humidity.   **Atmosperic pressure**   * Definition. * Causes. * Instrument used.   **Temperature**   * Definition * Instrument used * Types of thermometer.  1. **Clinical thermoter**.   - Structure.  - Liquid used and reasons  - Advantages of using mercury  - Normal human body temperature of celcious and Fahrenheight scale.  both scales.   1. Minimum and miximum **thermometer.**   - Structure. | * Draws a simple weather chart. * Describes an experiment to show how rain is formed * Names the parts of thermometer.   Languages.  The learner:-   * Explains orally the water cycle. * Pronounce, spell and write parts of a clinical thermometer. * Defines evaporation * Defines condensation * Defines transpiration |  |  | -Self awareness.  -Prediction |  |  |
|  | **3**  **4** | **HUMAN HEALTH** | **Personal Hygiene** | **Personal hygiene.**   * Definition. * Ways of keeping our body clean. * Items used in keeping our bodies clean. * Things used to keep our bodies clean. e.g * Towels * Soap * Razorblade * Water * Comb * Brushes * Importance of keeping our bodies clean.   \* Remove germs.  \* Remove dirt.  \*Avoid bad smell.  \* Keep health.  \* Be smart. | **Subject:**  The learner should be able to:-   * Define personal hygiene. * State ways of keeping our bodies clean. * Give the importance of personal hygiene. * Demonstrate clean body activities.   **Language.**   * Spell the words correctly. * Pronounce the words correctly. * Write the words in correct spelling. | -Discussion.  -Discovery  -Demonstration  -Observation  Question and answer. | -Combing hair.  -Brushing teeth.  -Washing the face.  -Cutting finger nails short. | -Appreciation.  -Caring.  -Responsibility  -Self esteem  -Assertiveness  Concern | - Comb  - Water  - Tooth paste.  - Tooth brush.  - Nail cutters. | MK. Intergrated primary Science Bk. |

**SCHEME OF WORK FOR P.4 SCIENCE TERM II**

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| **WK** | **PD** | **THEME** | **SUB-THEME** | **CONTENT** | **COMPETENCES** | **METHODS** | **ACTIVITY** | **LIFE SKILLS AND VALUES** | **INSTRUCTIONAL MATERIALS** | **REF** |
| **1** | **1** | **HUMAN HEALTH** | **OUR FOOD** | **OUR FOOD**   * Definition:   \*Food  \*Feeding  \*Nutrition   * **Sources of food**   \*Super markets  \*Markets  \*Shops  \*Gardens  Forest   * Why we eat food.   (5Hs)   * Uses of food in the body. * Balanced diet.   \*Definition  \*Components of balanced diet (classes of food)   * Sources of food values.   Carbohydrates:  Vitamins  Proteins  **Deficiency disease etc.**   * Definition * Examples * Causes * Sign of symptoms of each disease. * Prevention. * Ways in which food gets contaminated, bad feeding habits. * Prevention of food contamination. * Preparation of simple dishes locally. | **Subject:**   * Defines   \*Food  \*Feeding  \*Nutrition  \*Balanced diet  \*Deficiency diseases   * States why we eat food?. * Gives some sources of food. * Mentions some of the components of balanced diet.   **Language**   * Pronouncers, spell,s writes and reads words and sentences correctly.   **Language competence**  The learner:-   * Pronounces the words correctly. * Spells the given words correctly. | -Guided discovery  -Group discussion.  -Think pair share. | - Note making.  - Collecting food sources of food values.  -Grouping them according to food values.  -Drawing and painting different food stuffs. | -Appreciation.  -Care  -Love  Responsibility | * Real objects (food stuffs) | Comp. Science bk 4. Pg.  MK integrated scie pupils bk 4  Pg. |
|  |  |  | **HUMAN BODY ORGAN** | **Major body organ**   * Definition - Organ. * Examples of major body organs.   \* Eyes  \* Brain  \* Ears  \* Stomach  \* Nose  \* Bladder  \* Heart  \* Lungs  \* Liver  \* Tongue.  Kidneyd   * Structure showing location of each body organ. * Structure of each part and function. * Diseases and disorders. * Care for each body organ. | **Subject:**   * Identifies different body organs. * Defines: Organ. * States ways of caring for our body organs. * Draws and labels body organs.   Language:   * Reads, pronounces, spells and writes words correctly. * Answers simple comprehension questions correctly. | -Discussion  -Guided discovery.  -Question and answer.  -Demonstration. | * Singing a song. * Note making. * Drawing. * Answering both oral and written questions. | -Selfawareness  -Responsibility  Confidence  -Fluency.  -Effective communication  -Creative thinking  -Critical thinking. | - Chart showing  body organs. |  |
|  |  | **HUMAN BODY** | **THE TEETH** | **TEETH**   * Sets of teeth. * Types of teeth and their uses. * The tooth structure. * Functions of the internal parts of the tooth. * Regions of the tooth. * Diseases and disorders of the teeth. * How to care for the teeth. | **Subject**  The learner:-   * Identifies sets of teeth. * Describes the different types of teeth and their functions. * Draws different types of teeth with correct labeling.   **Languages**   * Reads, writes, pronounces words and sentences correctly. | -Discussion.  -Question and answer.  -Group work.  Guided discovery. | * Matching types of teeth to diagrams. * Drawing and labeling teeth structures. * Practicing brushing of teeth. * Answering oral and written questions. | -Effective communication.  -Self awareness.  -Critical thinking.  -Problem solving.  -Decision making.  - Confidence  -Care  -Acceptance | -A chart showing different types of teeth. | Comprehensive scie Bk. 4 pg. 151 – 164.  Intergrated scie. Bk. 4 pg. 112 – 118.  Fountain scie. Bk. 4 pg 119 - 129 |
|  |  | **HUMAN HEALTH** | **SANITATION** | * **Definition**   - Its elements (activities)   * Importance of good sanitation. * Germs and diseases   - Definition  - Where they are found.  - Types of germs  - How they are spread.  - Dangers of germs.  - The germ cycle (4Fs).   * **Rotting**   - Definition  - Importance of rotting  - Causes of rotting.  - Dangers of rotting.   * Ways of protecting against germs and diseases in our environment. | **Subject**  The learner:-   * Identifies sanitation concerns. * Draws diagrams on transmission of germs (germ path). * Carries out activities of keeping the environment clean. * Defines rotting   **Language**   * Spells, write and pronounce words correctly. | -Discussion  -Demonstration.  -Question and answer.  -Guided discovery. | -Drawing the germ path.  -Answering oral and written questions.  -Demonstrating way of keeping classroom clean. | -Self esteem.  Effective communication.  -Critical thinking.  -Problem solving.  -Care  -Love  -Respect.  appreciation | * Brooms. * Dustbin * Water * Plates * Prepared chats. | Comp. scie BK. 4.  Integrated Scie. Bk.4  MK. Bk. 4 pupils scie. |

**SCHEME OF WORK FOR P.4 SCIENCE TERM III**

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| **WK** | **PD** | **THEME** | **SUB-THEME** | **CONTENT** | **COMPETENCES** | **METHODS** | **ACTIVITY** | **LIFE SKILLS AND VALUES** | **INSTRUCTIONAL MATERIALS** | **REF** |
|  |  | **COMMUNICABLE DISEASES AND WORM INFESTATION** | **Diarrheal diseases or faecal diseases** | * Definition of Diarrhoea. * Examples of diarrhoeal diseases. * Causes * The 4Fs * Prevention. * Dehydration (Definition) * Its causes * Signs * (Use of ORS) * Solutes * Solvent * Solution * Rehydration (Definition) * Preparation of ORS and SSS. | * Identifies diarrheal diseases. * Describes the spread of the above diseases. * Demonstrates the preparation of ORS and SSS. * Draw the structure of a tape worm. * Tell how tape worms enter our bodies. * Defines dehydration * Defines rehydration | -Demonstration  -Discussion  -Guided discovery  -Question and answer | -Note making  -Preparing ORS and SSS  -Cleaning the toilet or latrines  -Boiling water  - Making SSS | -Critical thinking  -Problem solving  -Decision making  -Self awareness | * Water * Sugar * Salt * Spoons * Chart showing the 4Fs | Mk integrated Pri Sci Bk 4 Pg 124  Functional intergrated Pri Sci for Ug Pg 180 |
| **2** | **1** | **HUMAN HEALTH** | **VECTORS AND DISEASES** | **Common Vectors**   * Definition of vectors * Examples of common vectors * Cockroaches * Ticks * Bedbugs * House flies * Mites * Rats * Lice * Mosquitoes * Tsetse flies   \* Life cycle of vectors  \* **Diseases spread by each**  **vector**   * Body structure * Their habitat * Their feeding habits * Their life cycles * How they protect them selves from enemies   **How vectors spread diseases.**   * Through bites of infected anmals * Through contaminated food * Through contaminated air * Through open wounds * Through infected insect bites   **Prevention and control**   * Proper hygiene * Covering food. * Spraying * Biological control. * Sleeping under a treated mosquito net. | The learners:-   * Defines vectors * Identifies some common disease vectors * Describes characteristics of some disease vectors. | -Guided discovery  -Question and answer  Discussion.  Observation  Field  Study | - Naming  - Drawing  - Answering questions  Match | - Awareness  - Care  Responsibility  -Self awareness  -Decision making  Taking  Decision  Sharing  Appreciation  Effective communication | * A chart with some vectors. * Real vectors like cockroaches |  |
|  |  | **HUMAN HEALTH** | **Accidents poisoning and first Aid** | **Accidents**   * Definition * Types of accidents * Causes of accidents * Prevention of accidents   **First Aid**   * Definition * Reasons for giving first aid. * Responsibilities of a first aider. * Qualities of a first aider. * First aid kit (box) * How to use a first aid kit. * Components of the first and kit and uses. * Places where we find first aid box | The learner:-   * Names common accidents and poisoning at home, on the way to, from and at school. * States causes of accidents and poisoning. * Demonstrates how to take care of one who has taken poison.   **Language**   * Talks about common accidents. * Reads and writes words, sentences and stories about accidents. | -Guided discussion  -Group work.  Demonstration. | * Collecting first aid items. * Making a first aid box. * Demonstrating how to give first aid. | -Critical thinking.  -Problem solving  -Coping with stress.  -Care  Sympathy  -Responsibility | -Real first aid materials.  - Chart showing  common  accidents. | Mk intergrated Prim Sci Bk 4 Pg 154 |
|  |  | **WORLD**  **OF**  **LIVING**  **THINGS** | **Animal life (Rabbits)** | **Definition of terms**   * Rabbitary * Rabbit keeping   **External parts of a rabbit**  **Breeds of rabbits**   * Local * - Exotic * Examples of exotic breeds.   Importance / uses of rabbits.   * Advantages of keeping rabbits over other animals. * Housing in rabbits. * Management practices. * Diseases of rabbits and their control. * Keeping farm records. | **Subject**   * Defines new terms. * Names external parts of a rabbit. * Names breeds of rabbits. * Lists examples of exotic breeds. * Explains the uses of rabbits * Describes the habitat for rabbits * Demonstrates skills in keeping rabbits. * Names diseases of rabbits and their control. * Signs of a sick rabbit * Requirements of starting a rabbitary farm | Guided discovery  Discussion  Demonstration  Question and answer.  Group work field trip. | * Drawing. * Note taking * Answering oral and written questions.   . | -Effective communication.  -Critical thinking.  -Creative thinking.  -Decision making  -Problem solving.  -Appreciation  - Patience  -Care  -Fluency | -Prepared chart | Mk Intergrated Prim Bk 4 Pg 180 |
|  |  | **HUMAN HEALTH** | **Road traffic accidents, sprains, strains, bruises**  **wounds** | * Definition of road accidents. * Causes of road traffic accidents. * How to cross the road e.g. from zebra crossing. * How to prevent road traffic accidents.   Injuries / Fractures  **Types of injuries.**   * Fractures (types and their first aid) * Sprains and strains (their first aid). * Dis location and its first aid. * Bruises and their first aid. * Blisters and their first aid. * Wounds and their first aid. | **Subject competences**  **The learner**   * Names causes of road accidents * Name road users * Demonstrates how to cross a busy road.   **Language**   * Talks about common injuries. * Reads , poems , posters about accidents |  |  |  |  |  |
|  |  |  | **Accidents, poisoning and First Aid** | * Definition of * Poison * Poisoning * Common poisons in our homes. * Causes of poisoning. * Signs of poisoning * First aid * How to prevent poisoning. |  |  |  |  |  |  |
|  |  |  | **Intestinal worms infestation** | Definition:   * Intestinal worms * Parasites * Examples of intestinal worm  1. Tape worms   - Structure  - How it spreads  - How it feeds  - What it feeds on  - Effect on body prevention  and control   1. Hook worms  * Structure * How they enter into the body. * How they feed. * Prevention and control.  1. Round worms (Nematodes)  * Structure. * How they enter into the body. * How they feed. * Prevention and control.  1. Pin worms (thread worms)  * Their structure * Feeding habits * How they enter the body. * Prevention and control * Whip worms * Structure * How they enter our bodies. * Their feeding habits * Prevention and control | The learner:-   * Describes the habits of pin worms. * Describes the habits of whip worms |  |  |  |  |  |