 P.5 Science Scheme of Work

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| **WK** | **PD** | **THEME** | **TOPIC** | **SUB TOPIC** | **Subject competence** | **Language**  **competence** | **CONTENT** | **Method** | **Activity** | **t/l aids** | **Life Skills& Values** | **REF** |
| **1** | 1 | **Science in human activities and occupation** | **Keeping poultry and bees** | **Poultry keeping** | The learner   * Describes term poultry keeping * Naming the examples of poultry * Drawing poultry birds * Giving the   importance of poultry | The learner;   * Constructs sentences correctly about poultry * Reading , writing and pronouncing words   correctly | * Terminologies used in poultry. * Poultry * Poultry keeping * Hens * Cocks * Chicks * Pullets etc * Examples of poultry * Importance | * Question and answer * Discussion * Guided * discovery * Field trip | * Naming examples of poultry * Describing different examples of poultry * Answering questions | -hens  -Cocks  -Eggs | -Effective communication  -Critical thinking  -Problem solving | * Primary five curr. pg 22-24 * Baroque integrated science pg 1-2 |
|  | 2 | * The learner; * draws and describes external parts of a domestic fowl | - | * External parts of a domestic fowl * Functions of each part * Physical differences   between a cock and hen | - Drawing and naming the external parts of a hen | - A domestic fowl | - Care  -Responsibility | - Agriculture for secondary schools |
|  | 3 | * Identifying different types of feathers. * Giving the importance of feather | - | * Feathers * Importance of feathers to people and birds * Types of feathers * Diagrams of   different feathers | - | - | - Feathers | * Drawing different types of feathers * Stating the importance of feathers | - |
|  | 4 |  |  | - Identifying the examples of chicken | - | * Types of chicken   + Layers   + Broilers   + Dual purpose * Examples of each type of chicken | - | - | - | * Naming different types of chicken * Giving examples of each type of chicken | - |

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|  | 5 |  | **Keeping poultry and bees** | **Poultry keeping** | The learner:   * Describes the breeds of chicken * Writes examples of exotic breed * Gives the characteristics of each breed * Writes the advantages of each type of breed | The learner  - Pronounces, reads, writes and spells the words correctly | * Breeds of chicken * Local breeds * Hybrids * Examples of exotic * Characteristics of local and exotic breed * Advantages and disadvantages of exotic breed | * Guided discussion * Filed trip * Question and answer | * Answering questions * Naming the exotic breed | - Poultry birds | * Decision making * Problem solving | - Beginning agriculture A course bk for pupils pg 65-69 |
|  | 6 |  |  |  | * Describes the systems of keeping poultry * Gives advantages and disadvantages of each system | * Constructs correct sentences about systems of poultry * Spells the names of each system correctly | * Systems of keeping poultry. * Free range system * Advantages and disadvantages * Deep litter system * Advantages and disadvantages of deep litter   system | - Field trip | * Explaining how to manage systems of keeping poultry * Describing the systems of keeping poultry | - | Creative thinking Appreciation Love  Care | * Baroque integrated science pg 4-10 * Livestock technical hand bk 76-78 |
| **2** | 1 |  |  |  | - Describes the system and keeping poultry | - Construct correct sentences about poultry | * Battery cage system * Advantages and disadvantages * Fold pen system * Advantages and disadvantages | * Field * trip | - | - Systems of keeping poultry | Effective communication  Creative thinking | - Baroque integrated science pg 4-10 |
|  | 2 | **Science in human activities and occupation** | **Keeping poultry and bees** | **Poultry keeping** | The learner:   * Outlines the good feeding practices in poultry * Identifies different feeds | - | * management practices in poultry * Feeding of chicken * Reasons why we feed poultry * Types of mash * Classes of food needed in the   bird’s diet | * Observation * Discussion * Question and answer | * Mixing poultry feeds * Identifying the sources of each class of food | - Poultry feeds | * Problem solving * Creative thinking * Responsibility | - Primary 5 curr. pg 23 |

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|  | 3 |  |  |  | * Lists the general good feeding practices in poultry * identifies the functions of each part | - Draws and names different parts of a fowl in correct English | * Good feeding practices in poultry * The digestive system of a fowl * Function of each part | - Demonstration | - Drawing and naming of alimentary canal | - The digestive system | - Critical thinking | * Baroque integrated science pg 12-13 * Beginning Agriculture bk 3   pg 70 |
|  | 4 |  |  |  | * The learner: * Describes the term incubation * States the conditions necessary for incubation * Names the two types of incubation | - Spells and pronounces words correctly | * Incubation * What it is * Conditions necessary for eggs to hatch * Incubation period of different birds * Types of incubation   + Natural & Artificial * Advantages & disadvantages | * Explanation * Question and answer | - Explaining the conditions necessary for incubation | - Poultry birds | - | - Beginning Agriculture bk 3 pg 59 |
|  | 5 |  |  |  | - Defines artificial incubation | - | * Artificial incubation * Advantages and disadvantages | - Observation | - Drawing the incubator | - A chart showing an incubator | - Effective communication | - |
|  | 6 |  |  |  | * The learner; * describes the term breeding * Identifies the types of brooding * relates brooding in his/her life situation | The learner;   * Constructs correct sentences about brooding * Spells, writes/reads and pronounces correct sentences and words | * Brooding * What it is * Types of brooding   + Natural brooding   + Artificial brooding * Natural it is * Advantages and disadvantages | * Discussion * Group work * Question and answer | * Defining the term artificial brooding * Naming the type of brooding | - The structure of a brooder | * Effective communication * Creative thinking | - Primary five curr pg 23 |
|  |  |  |  |  | - |  | * Artificial brooding * What it is * Advantages and disadvantages * Requirements for a brooding * Types of artificial brooding * A diagram of a brooder | - | - | - | - | - |

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| **3** | 1 |  |  |  | * Defines the term fertilization * Name the parts of the oviduct and their function | * Draws and names the parts of an egg and oviduct corrects * Spells words well | * Fertilization in poultry. * What it is * The oviduct of a hen * Internal structure of an egg * Function of   each part of the egg | - | - Drawing and labeling the oviduct and the structure of an egg | * The oviduct of hen * An egg | * Responsibility * Care | - Agriculture for secondary schools pg 104 |
|  | 2 |  |  |  | - |  | * Poultry vices * What it is * Causes of poultry * Examples of poultry vices * Egg eating * Signs of egg eating * How to control egg * Egg eating | - | * Defining the term poultry vice * Identifying examples of poultry vices | - The broken egg | - | * Livestock technical hand book pg 91 * Baroque integrated science pg 12-13 |
|  | 3 |  |  |  | The learner;   * defines the term cannibalism * Identifies the signs, causes and prevention of feather, skin and toe pecking * Relates poultry vices in his/her life situation | The learner;   * constructs correct sentences about cannibalism, toe and feather pecking * Spells and writes the words   correctly | * Cannibalism (definition) * Signs and causes of cannibalism * Prevention of cannibalism * Feather, skin and toe pecking * Causes * signs * Ways of preventing feather, skin and   toe pecking | * Guided discovery * Observation * Field trip * Question and answer | * Identifying different poultry vices and their signs * Naming causes of poultry of poultry vices | - | * Self awareness * Effective communication * Empathy | - Intergrated science pg 13-14 |
|  | 4 |  |  | **Poultry diseases** | * Identifies common conditions that may lead to poultry diseases * Outlines the   control of poultry diseases | * Pronounces, reads and writes words correctly * Constructs correct sentences | * Conditions which may lead to poultry diseases. * Examples of common poultry diseases and their causative agents * Protozoa | - do - | * Outlining poultry diseases * Identifying poultry diseases | - | - Logical and critical thinking | - Fountain primary science pg 20-21 |

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|  |  |  |  |  |  |  | diseases  a) Coccidiosis   * Signs and symptoms * Ways of controlling   b) Black head   * signs and symptoms * prevention and control |  |  |  |  |  |
|  | 5 |  |  |  | * Lists viral poultry diseases * Gives signs and symptoms of viral diseases | * Reads, pronounces and writes the words correctly * Constructs correct sentences | * Viral diseases   1. New castle disease   2. Gumboro disease   3. Fowl fox disease * Signs and symptoms * Prevention and control | - do - | - Identifying examples of poultry diseases and their signs | - | * Empathy * Effective communication | - do - |
|  | 6 |  |  |  | * Outlines examples of bacterial diseases * Identifies the signs and symptoms of poultry diseases * Lists ways of controlling and preventing bacterial diseases | - Reads, pronounces and writes the words correctly | * Bacterial diseases   1. Pneumonia * Signs and symptoms * Prevention and control   b) Fowl typhoid   * signs & symptoms * Prevention and control   c) Avian leucosis   * signs & symptoms * General control of   poultry diseases | * Questions and answer * Discussion | * Naming examples of bacterial diseases * Identifying signs of bacterial diseases | - | * Effective communication * Critical thinking | - Fountain primary science bkspg 20-21 |

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| **4** | 1 |  |  | **Poultry Parasites** | * Defines parasites * Lists examples of internal and external parasites * Gives ways of controlling parasites in poultry | The learner;  - Reads, pronounces and writes the words correctly | * What are parasites * Types of parasites   1. Ecto parasites * Examples and their effects * Control of ecto parasites   b) Endo parasites   * Examples * Effects of endo parasites * Control of endo parasites * General control of poultry parasites * Practices in proper   management of poultry | * Discussion * Question and answer * Explanation | * Naming types of poultry parasites * Identifying examples of ectoendo parasites | - Tick mites | * Critical thinking * Effective communication | - Fountain primary science bkspg22 |
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|  | 3 |  |  |  | The learner;   * describes the term poultry farm records * Outlines the importance of records | * Constructs sentences correctly about farm records * Pronounces words correctly. | Farm records   * What it is * Examples of farm records (types) * importance of farm records * factors to   consider when starting a farm | * Discussion * Demonstration * Guided discovery | * Defining the term farm * Records * Outlining some examples of farm records | - The farm record | - | - Fountain Integrated primary science bk5 pg 19 |
|  | 4 |  |  | **Keeping of bees** | The learner;   * gives different types of bees * identifies the function of each type of bee in a hive | * Constructs correct sentences about bees * Pronounces words correctly | Bee keeping   * Apiculture * Definition * Colonies * Social insects * Solitary insects * Types of bees (casts) * Queen structure * Importance | * Question and answer * Discussion * Demonstration | * Drawing of different types of bees * defining the term swarming | - The structure of Queen, drone and worker bee | * Effective communication * Creative thinking | - Livestock technical hand book pg 110-111 |

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|  | 5 |  |  |  |  | - | * Drone bee –   structure   * Importance * Work bee * Importance of work bee in the hive * Diagram of honey comb Uses of propolis   in a hive |  | - | - The structure of Queen, drone and work bee | * Logical thinking * Care * Concern | - Baroque integrated science pg 17-18 |
|  | 6 |  |  |  | * Describes the term swarming * Outlines some reasons why bees swarm | * Constructs correct sentences about bees swarming * Spells words correctly | SWARMING   * What it is * Reasons why bees swarm * Methods of   preventing swarming | - | - | - | - | - |
| **5** | 1 |  |  |  | * Names parts of a bee and their function. * Identifies the importance of bee to people and plants | - Constructs correct sentences about the life cycle of a mosquito | LIFE HISTORY OF A BEE   * Diagram showing the lifecycle if a bee. * External parts of a honey bee * Functions of each part | * Discussion * Question and answer * Demonstration   - | - Drawing and naming lifecycle of a mosquito | - | * Effective communication * Critical thinking * Appreciation | - Baroque integrated science pg 19-20 |
|  | 2 |  |  |  | * Outlines the types of a bee hive * Draws the diagram of a bee hive | - Pronounces, spells and writes words correctly | * Importance of bees to people and animals * Products got from bees * Uses of honey * Products got from bee works | - Guided discovery | - Answering questions correctly | - | * Responsibility * Care | - Primary five curriculum pg 23 |
|  | 3 |  |  |  | * Outlines the types of bee hives * Draws a traditional bee hive | * Reads words correctly * Spells words correctly | Bee hive   * Types of bee hives   + Traditional bee hive   + Modern bee hive * Traditional bee hive | - | - Drawing a traditional bee hive | - The structure of a traditional bee hive | - Livestock technical and handstockpg 110-111 |

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|  |  |  |  |  |  |  | * Examples of a traditional bee hive * Diagram of a traditional bee hive   - Advantages and disadvantages of a traditional bee hive |  |  |  |  |  |
|  | 4 |  |  |  | * Draws a modern bee hive * Gives the advantages & disadvantages of a modern bee hive | - Pronounces, spells and writes words correctly | Modern bee hive   * Definition * The structure of a modern bee hive * Advantages and disadvantages of a modern bee hive * Examples | - | - Drawing a modern bee hive | - The structure of a modern bee hive | - | - |
|  | 5 |  |  |  | * Identifies differences between traditional and modern bee hives. * Names materials used by a bee keeper when handling bees | * Constructs correct sentences about bees. * Spells different words | * Differences between traditional and modern bee hive. * Harvesting of honey * Equipments used by a bee keeper when handling bees * Materials used in a smoker * Diagram of a person ready to harvest honey | * Guided discovery * Demonstration * Group work | - Drawing and naming the parts of a person handling bees | - Equipments used in handling bees | - Effective communication  - Creative thinking  - Critical thinking  - Problem solving | - Fountain Integrated primary science pg 23-31 |
|  | 6 |  |  |  | * Outlines the methods of extracting honey * Gives the products of bees * Gives the | * Constructs sentences well * Reads words properly | * Honey extraction * Methods of extracting honey   + pressing method   + floating | - Guided discovery | * Outlines various methods of extracting honey * Give two | - | - Baroque integrated science pg 21-25 |

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|  |  |  |  |  | importance of bees |  | method   * centrifigue * Products of bees * Importance of bees * Feeding of bees |  | products of bees |  |  |  |
| **7** | 1 |  |  |  | * Outlines the factors to consider when setting a hive * Gives methods of stocking a hive | * Pronounces words correctly * Spells words well | Sitting and stocking a hive   * Factors to consider when setting a hive * Stocking a hive * Ways of stockings a hive (methods) | - | - What are the factors to consider when setting a hive | - | - | - |
|  | 2 |  |  |  | * Gives the ways of preventing enemies from attacking bees * Gives the occasions when a bee keeper   handles bees | * Constructs sentences well * Pronounces words correctly | * Enemies of bees * Ways of preventing enemies from attacking bees * Occasion when a bee keeper   handles bees. | - | - Give any three ways of preventing enemies from attacking bees | - | - | - |
|  | 3 | **Matter and Energy** | **Measurement** | **Measuring** | * States the different measurements of objects * Explains the need for standard measure of massive weight and volume | * Constructs correct sentences about measurement * Spells, pronounces and writes words like length, mass, etc correctly | * Measuring, what it is. * Length * What it is * Units for measuring length * Materials used to measure length * Area * What it is * Finding area by counting square units * Finding area using the formular | * Observation * Discussion * Guided discovery * Filed trip | - Comparing different objects by mass, volume and weight | * Bricks * Boxes * Books | * Self awareness * Effective communication * Creative thinking | - Long man primary science pg 91-100 |
|  | 4 |  |  |  | - | - | * Mass and weight * What they are:- * Basic units of each of them * Differences between mass and   weight | - | - Defining mass & weight | - | - Logical thinking  - Appreciation | - |

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|  | 5 |  |  |  | - | - | * Volume and capacity * What they are * Finding volume of objects * Types of objects * Finding volume of regular objects * examples of regular objects | - | - | - | - | - |
|  | 6 |  |  |  | - | - | Irregular objects   * What they are * Finding volume of irregular objects * examples of irregular objects | - | - | - | - | - |
| **8** | 1 |  |  | **Behaviour of objects in water** | * describes the behaviour of objects in water * Identifies floating and sinking objects * Relates floating and sinking objects in his or her life situation | * Constructs different sentences correctly * Spells words correctly | Behaviour of objects in water floating and sinking objects Examples of objects (sinking and floating objects) Buoyancy force Reasons why  some objects sink  and float | * Demonstration * Observation | - Collecting leaves in water | - Conc leaves water | - Effective communication  - Creative thinking  - Critical thinking | - |
|  | 2 |  |  |  | - | - | Density  - What it is  - Its standard unite  - Instrument for measuring density  - Finding density of objects  - Finding density, mass and volume  in relation | - | - | - Instruments for measuring density | - | - |

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|  | 3 | **Human Health** | **Immunity and Immunisation** | **Immunity** | * Describes the meaning of immunity * Identifies the types of immunity * Explains the importance of immunity | * Constructs correct sentences about immunity * Spells, writes and reads words used | Immunity  - What it is  - Types of immunity  - Natural immunity  - Artificial immunity  - How to acquire natural and artificial immunity  - Importance of immunity  - Immunisation Childhood immunisable diseases | - | * defining the terms immunity and immunisation * Identifying different types of immunity | - | - Effective communication  - Critical thinking  - | - Primary five currpg 38-39 |
|  | 4 |  |  | **Immunisation** | * Identifies the causes of tuberculosis and its signs * Outlines different ways of preventing tuberculosis | * Constructs correct sentences about immunisable diseases * Spells, writes and reads common words   correctly | Tuberculosis   * causes, signs and symptoms * prevention and control polio (poliomyelitis) * causes, signs and symptoms * prevention and control | * Discussion * Guided discovery * Question and answer | - Outlining the causes of signs of immunisable diseases | - | - Self awareness  - Effective communication  - Self esteem  - care  - empathy  - responsibility | - |
|  | 5 |  |  |  | - | Whooping cough   * Cause, spread * Signs & symptoms * Prevention & control Diphtheria * cause, spread * Signs & symptoms * prevention and control Hepatis * Signs, cause, prevention * Effects of immunisable diseases to   children |  | - | - | - | - | - |

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|  | 6 |  |  |  | - Names other immunisable diseases |  | Other immunisable diseases.  - Immunisation sites and schedules  - Importance of immunisation | - | - | - | - | - |
| **9** | 1 |  |  |  | * Describes the term vaccines * Outlines the types of vaccines |  | Vaccines  -What it is  -Types of vaccines  -Examples of vaccines  -antibodies | - | - | - | - | - |
|  | 2 |  |  |  | - | Roles of individuals, families and communities   * How to identify an immunize child * Child health card * Importance of a child health card to parents and health workers |  | - Guided discussion | - singing songs about immunisation | - | - Critical thinking | - |
|  | 3 | **Human Body** | **The digestive system** | **Digestive system** | * explains what digestive system is; * What is digestion * Name the types of digestion | * Constructs correct sentences about digestion * Spells words correctly | Digestive system   * What it is * Digestion * Types of digestion * Process involved in the use of food in animals * Parts of the digestive system * Functions of each part * Digestion in the mouth * Function of the gullet * Digestion of food in the gullet | * Demonstration * Discussion * Observation | - Drawing and labeling the different parts of the digestive system | - | - | - |
|  | 4 |  |  |  | - | - | Digestion in the duodenum   * Digestion in the ileum * End products of digestion * Adaptation of the ileum to its function | - | - | - |

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|  | 5 |  |  | **The digestive juice** | - | - | Enzymes   * What it is * Characteristics of enzymes * Diseases and disorders of the digestive system * causes of constipation * ways of keeping the digestive system in good health | - Question and answer | * Defining different types of enzymes * Outlining diseases and disorders | - | - Care  - Effective communication | - Integrated science bk5 pg 65 |
|  | 6 | **The Environment** | **Components of the environment** | **SOIL** | * defines terms related to soil * Mention types of soil * States the characteristics of different soil types * Identifies the use of each type of soil | * States the meaning of the given terms * Describes the characteristics of different types of soil * Makes sentences using the   given terms | * Definition * Characteristics of soil types * Diagram showing arrangement of soil particles * Uses of each type of soil | * Question and answer * Explanation | * Drawing * Describing | - Different types of soil | - care  - Effective communication | - Integrated primary 5 sci |
| **10** | 1 |  |  | **Components of soil** | * defines terms relates to soil * mentions types of soil * states the characteristic of different soil types * identifies the use of   each type of soil | - Explains the experiment in correct English | * Components of soil * Importance of each soil competence * Experiment to show the presence of each component | * Explanation * Guided discovery * Discussion | - Performing experiments | - soil | * Problem solving * Responsibility | - Agric for secondary |
|  | 2 |  |  | **Soil formation, drainage and capillarity** | * States ways through which soil is formed * performs an experiment to show soil drainage and   soil capillarity | - Defines terms e.g weathering, decomposition, soil capillarity | - Soil formation   * Weathering * decomposition * Soil drainage * Soil capillarity | - | - Baroque integrated scie |

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|  | 3 |  |  | **Soil erosion** | * defines soil erosion * states the causes of soil erosion * Explains the effects of soil erosion * Identifies methods of controlling soil   erosion | -Gives definition in good sentences  -Writes the given sentences correctly | * definition of soil erosion * Agents of soil erosion * Effects of soil erosion * Methods of controlling soil erosion | - | - | - | - | - |
|  | 4 |  |  | **Soil fertility** | * Defines soil fertility * Points out ways of improving soil fertility * mentions the types of fertlizers * gives examples of fertilisers (natural) * explains the advantages and disadvantages of   natural fertilisers | -gives explanation in correct sentences  -writes sentences correctly | * Soil fertility * ways of improving soil fertility * examples of natural fertilizers * Advantages of natural fertilisers | * Question and answer * Explanation | - Describing | - soil | - Critical thinking  - Problem solving  - responsibility | - |
|  | 5 |  |  | **Artificial fertility**  **Soil pollutants** | * Points out the examples of artificial fertilisers * Lists the advantages and disadvantages of artificial fertilisers * Defines soil pollutants * Explains the effects of soil pollutants | - Discusses the advantages and disadvantages of artificial fertilisers | * Examples of artificial fertilisers * Advantages and disadvantages of artificial fertilisers * Soil pollutants * Examples of soil pollutants * Effects of soil pollutants | - Guided discovery | - Writing | - Artificial fertiliserse.g CAN, DAP | - |

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|  | 6 |  |  | **Soil exhaustion** | * Defines soil exhaustion * States the causes of soil exhaustion * identifies the methods of preventing soil   exhaustion | -Gives definition in correct sentences | * Soil exhaustion * Causes of soil exhaustion * Methods of preventing soil exhaustion | - Discussion | - | - | - | - |
| **11** | 1 |  | **Crop growing** | **Types of crops** | * Outlines the types of crops. * describes the tuber crops * Outlines the types of tuber crops | - constructs sentences correctly  - Spells words  - Pronounces words | * Types of crops * Tuber crops * Types of tuber crops * Examples of tuber crops * Growing and caring for tuber crops * Propagation of tuber   crops | - Drawing diagrams of tuber crops | - Tuber crops (real objects) | * Guided discussion * Observation * Group work * Brain storming | * Effective communication * Critical thinking * Concern * problem solving | - |
|  | 2 |  |  |  | * Gives the common pests and diseases of tuber crops * Outlines the characteristic of common tuber crop pests * mentions the effects of pests and diseases to tuber   crops | - constructs sentences correctly  - Spells words  - Pronounces words | * Common pests and diseases of tuber crops * Characteristics of common tuber crops * Effects of pests and diseases to tuber crops * Methods of   controlling pests and diseases | - Outlines any three characteristics of common tuber crop pests | - | - |
|  | 3 |  |  |  | * Gives examples of legume crops * Gives the characteristics of legume crops * mentions the examples of fruit crops * Gives the examples of   vegetable crops | -Pronounces words  -constructs sentences correctly  -Spells words correctly | * Leguminous crops * Examples of legume crops * Characteristics of legume crops * Cereal crops * examples of cereals * fruit crops * vegetable crops | - drawing legume crops | - Real objects of legume crops | - | - sharing | - |

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|  | 4 |  |  | **Nursery bed** | * defines a nursery bed * Gives the advantages of a nursery bed * describes what transplanting is * Gives different crop growing practices | -Pronounces words  -constructs sentences correctly  -Spells words correctly | Nursery bed   * Advantages of a nursery bed * crops grown in a nursery bed * How to care for crops in a nursery bed * Transplanting * crop growing practices | - setting up a nursery bed | - Real examples of crops grown in a nursery bed | * Group work * Guided discovery | - Co-operation  - sharing  - critical thinking  - Responsibility | - |
|  | 5 |  |  |  | * Gives the examples of common garden tools * mentions the uses of different garden tools * Gives ways of caring for the   garden tools | - | * Garden tools * Examples of common garden tools * Uses of different garden tools * Caring for the garden tools | - Drawing different garden tools | - Real garden tools | * Brain storming * Guided discovery * Group work | - Problem solving | - |
|  |  |  | **Matter and energy** | Matter and its states | * Definition of matter * Properties of matter * Identifies what causes changes in matter state. * Mention changes in matter states * The examples of matter * States of matter * Examples of matter in each state * Molecuels in each state of matter * Properties of each state of matter | * Describe matter and its characteristics * States of matter (solids, liquids and gases) * Stating examples of matter * Drawing arrangements in each state of matter * List   characteristics of each state of matter | Definition of matter Properties of matter States of matter Examples of matter in each state  States that make up matter  Arrangement of molecules in each state  Changes of states of matter  Causes of changes of states of matter Definition of each change  Illustration showing the changes of states matter  - Defn: Solute ,  solvent | Defining matter  Naming different states of matter  Experimenting, mixing and separating mixtures | water ash sand tins bottles | - | - | MK Integrated Science bk5 pg103  Comprehensive primary Science bk5 pg49 |

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|  |  |  | **Definition of energy** |  | * Definitino of energy * Types of energy * Forms of energy * Characteristics of forms of energy * Defines heat energy * Identifies sources of   heat | * Describing energy * Writing short notes on forms and types of energy | Definition of energy Types of energy (kinetic and potential)  Forms of energy (sound, electric, magnetic, light) Definition of heat energy  Sources of heat Uses of heat energy |  | Naming types of matter Explaining the forms of matter Defining the term heat | The pendulum cob  Strings Stones  Burning candle |  | Mk integrated science bk5 pg 106-109  Comprehensive prim scie bk5 pg 50 – 59 |
|  |  |  |  | **Effects of heat on matter** | * Identifying the effects of heat on matter * Drawing experiments showing explosion and contraction | Illustrating expansion and contraction | Listing down the effects of heat on matter Expansion and contraction Experiments of illustrations on expansion and contraction Preventing expansion and  contraction effects |  | Stating effects of heat on matter Describing the experiment on effects of heat on matter | Butter Ice  Match box Nails Burning candles | -do- |  |
|  |  |  |  | Heat transfer in matter | * Describing how heat travels * Drawing diagrams showing how heat travels in different   materials | - Drawing different diagrams showing heat transfer in matter | Describing the transmission in states of matter i.e. solids, liquids, and gases  Explaining conduction, convection and  radiation |  | Discussing the ways in which heat travels | -do- | -do- |  |

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|  |  |  | **Matter and energy** | Application of conduction, convection and radiation in our daily life | * Identifying the improtance of conduction, convection and radiation in daily life. * Observing parts of a vacuum flask. * Identifying the differences between conductors and insulators | Observes parts of a vaccuum flask | Importance of conduction, convection and radiation in everyday life. Operation of a vacuum flask Dangers of conduction Differences between insulators and conductors.  Giving examples of insulators and conductors Application of insulators and conductors in our daily life Differences between heat absorbers and  reflectors |  | Discussing the important of conduction, convection and radiation Grouping insulators and conductors of heat | Nails Cotton wool Wires  Cork |  | Comprehensive Primary Science bk5  MK primary Science bk5 pg 105 - 109 |
|  |  |  |  | Forms of energy (temperature) | * Defines temperature * Relates temperature to heat * States diiference between heat and temperature * Explains the tyeps and uses of thermometers * Converts degrees to different   scales | * Spells words correctly * Reads stories about heat and temperature * Write short stories on temperature * Draws and labels ,types of thermometer | Definition of temperature Difference between heat and  temperature Temperature scales Types of  thermometer Identifying functions of parts of a clinical thermometer Identifying functions of parts of a clinical thermometer Liquids in in |  | Stating the difference between heat and temperature Observing they types of thermometers Drawing and labeling parts of a thermometer | A clinical thermometer A chart showing parts of a thermometer |  | Comprehensiving primary Scie bk5 pg77 – 80  Mk primary Scie bk 5 pg124-126 |

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|  |  |  |  |  |  |  | thermometers Advantages and disadvantages of each.  Conversion of temperature from one scale to another i.e.  Centigrade to  Fahrenheit and vice versa |  |  |  |  |  |
|  |  |  | **Matter and energy** |  | Defining what rusting and burning are.  Explaining the disadvantages of rusting  Describing ways of putting out fire | Define the terms combustion and rusting  Spell the words correctly Drawing and observing experiment showing rusting and burning. | Definition of burning (combustion) Stating the condition necessary for burning  Zones in a candle flame.  By products given out.  Experiments on burning.  Ways of putting out fire.  Definition of rusting. Conditions for rusting.  Experiments on rusting.  By-products given out.  Disadvantages of rusting.  Ways of preventing rusting of metallic objects.  Comparing rusting and burning. |  | Discussing what burning is. Discussing the conditions for burning to take place.  Drawing and labeling the zones in a burning candle. | A burning candle  Glass Water Tines |  | Comprehensive primary Scie bk 5 pg83-85 |

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|  |  | **Science in human activities and occupation** | **Growing crops** |  | The learner; Identifies the characteristics of common tuber crops.  Discusses ways of growing and caring for tuber crops.  Identifies pests and dieases of tuber crops.  Describes the characteristics of common tuber crop pests and their effects.  Discusses methods of controlling pests and diseases of tuber crops. | Name the common tuber crops.  Describe ways of caring for tuber crops.  Rads words, sentences about growing and caring for tuber crops.  Writes words, sentences and stories about growing tuber crops. | Definition of; Root tubers Stem tubers  Examples of each type of tuber crop. Growing and caring for tuber crops.  Planting materials for tuber crops and their qualities.  Common pests and diseases of tuber crops.  Characteristics of common tuber crop pests.  Effects of pests and diseases to tuber crops.  Rotting of tubers. Holes in tubers and in leaves.  Leaf yellowing and curling.  Methods of controlling pests and diseases of tuber crops.  Harvesting, processing and storage of tuber crops.  Young farmers club Leguminous crops Examples of leguminous crops Characteristics of  leguminous crops |  | Identifying and naming common tuber crops.  Describing ways of planting and caring for tuber crops.  Listing the characteristics of common tuber crop pests.  Explaining controlling pests and diseases of tuber crops. Suggesting methods of harvesting/ processing and storing tuber crops.  Identifying advantages of young farmers’ clubs. | Cassava Sweet potatoes  Irish potatoes Yams Turnips |  | Comprehensive pri sci bk5 |

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|  |  |  |  |  |  |  | Cereal crops Examples Characteristics fruit crops Vegetable crops A nursery bed  Garden tools |  |  |  |  |  |
|  |  | **The world of living things** | **Bacteria and fungi** |  | Describes bacteria, where they are found and where they breed.  Describes characteristics of bacteria.  Discusses the ways preventing, controllign and treating bacterial diseases.  Describes fungi as warmless and harmful organisms.  Identifies dangers of fungi.  Discuss ways of preventing and controlling bacteria and fungal diseases. | Describes bacteria/ fungi  Acts a dialogue on useful and harmful bacteria.  Reads words, sentences and stories about bacteria and fungi.  Writes words, sentences and stories | Definition of bacteria.  Habitat for bacteria Feeding  Breeding (movement) Types of bacteria Harmful bacteria Diseases they cause  Prevention of such diseases  Useful bacteria Definition of fungi Examples of fungi Harmful and useful fungi  Importance of fungi Diseases caused by fungi Prevention and control of fungal diseases Comparison between bacteria and fungi  Pioneers of Science; Edward Jenner, Louis Pasteur, Sir Ronal Ross, Robert Koch, Sir William Harvey, Joseph Listeretetc |  | Defining the term bacterial, fungi.  Identifying different modes of bacteria.  Identifying the types of bacteria  Stating the prevention and control of diseases caused by either fungi or bacteria | Microscopes  Testing specimens  Books for reference  Environment |  | Comp pri sci pg 187 |

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|  |  | **Managing changes in the environment** | **Types of changes** |  | The learner;  Identifies the types of changes in the environment  Describes how changes take place in the environment.  Identifies the characteristics of physical and chemical changes.  Describes the examples of each type of change. | The learner;  Names the types of changes.  Reads the words and sentences about the types of changes correctly | Changes in the environment   1. Biological changes; what they are, examples 2. Physical changes; examples, characteristics of physical changes 3. Chemical changes, examples and characteristics of chemical changes   Effects of various types of changes to people, animals and plants.  Increases in size, increases in temperature, mountain formation, rain formation. |  | Explaining the different changes in the environment.  Identifying changes under biological, physical and chemical changes.  Experimenting on physical changes or states of water. | Blackboard Butter Candle wax Match box Kettle Water Stove Papers  Ice |  | Comp pri sci bk5 |
|  |  | **Keeping goats, sheep and pigs** | **Goats** |  | Identifying the names of external parts of a goat.  Describing different breeds of goats. | Naming external parts of a goat. | Drawing and naming external parts of a goat.  Reasons why farmers rear goats.  Terms used in goat rearing.  Identifying the breeds of goats. |  | Listing the external parts of a goat.  Discussing the ways of feeding goats and housing them. | A chart showing external parts of a goat. |  | Comp scie bkk  MK integrated pri Sci bkk pg 69-78 |

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|  |  |  |  |  |  |  | Stating the gestation period of a goat.  Feeding goats and housing them.  Types of goats.  Methods of grazing goats under each system. |  |  |  |  |  |
|  |  |  | **Sheep** |  | Describing uses of sheep | Naming external parts of a sheep | Drawing and naming the external parts of a sheep Reasons for keeping sheep Terms used in rearing sheep Identifying the breeds of sheep Giving examples of local and exotic breeds of sheep Gestation period of  sheep |  | Drawing and labeling external parts of a sheep.  Listing the exotic breeds of a sheep | A chart showing external parts of a sheep |  | Mk pri sch bk5 pg78-83  Comp pri sci bk5 pg36-45 |
|  |  |  | **Housing and management of goats and sheep** |  | Describing the qualities of a good house for a goat and a sheep | Mentioning the importance of proper housing of goats and sheep. | Stating how a house for a goat and a sheep should be made.  Mentining the improtance of proper housing.  Identifying the |  | A chart showing a house of a sheep and that of a goat | Textbooks |  | -do- |

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|  |  |  |  |  |  |  | practices doen in management of goats and sheep. |  |  |  |  |  |
|  |  |  | **Castration** |  | Naming the methods of castration | Writing sentences about methods of castration | Definition of castration Identifying the methods of castration Reasons for castrating male animals.  Advantages and disadvantages of castration. |  | Stating what castration is.  Discussing the methods of castration.  Explaining the advantages and disadvantages of castration. | A chart showing burdizzo |  | Mk pri sci bk 5 pg83 – 84 |
|  |  |  | **Diseases and parasites of goats** |  | Discussing causes, signs and symptoms  Prevention and control of diseases in sheep and goats. | Naming diseases and parasites of sheep and goats. | Listing the diseases for goats and sheep.  Stating signs and symptoms of goats and sheep diseases.  Stating the causes of the mentioned diseases.  Definition of parasites.  Types of parasites that attack goats and sheep.  Examples of parasites.  Prevention and control of goats, |  | Listing diseases of goats and sheep.  Discussing the signs and symptoms of goat diseases.  Listing examples of parasites | -do- |  | -do- |

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|  |  |  |  |  |  |  | sheep diseases and parasites.  Products from sheep and goats. |  |  |  |  |  |
|  |  |  | **Piggery** |  | Describing terms used in piggery | Writing reasons for keeping pigs. | Definition of piggery.  Reasons for keeping pigs.  Terms used in piggery.  Breeds of pigs and examples |  | Discussing reasons for keeping pigs  Explaining terms used in piggery. | A chart showing exotic breeds of pigs. |  | Mk pri scie bk 5 pg91-94 |
|  |  |  | **Proper pig housing and management** |  | Identifying qualities of a good pigsty | Naming systems of rearing pigs. | Mentioning systems of keeping pigs.  Advantages and disadvantages of each system.  Qualities of a good pig house/ sty.  Advantages of proper housing of pigs. |  | Classifying breeds of pigs.  Naming different systems of rearing pigs. |  |  | Mk pri sci bk 5 pg96 |
|  |  |  | **Feeding pigs, weaning and deworming** |  | Identifying the feeds for pigs | Naming methods of deworming piglets | Naming the feeds for pigs.  Stating the advantages of proper feeding of pigs.  State the period of |  | Listing feeds for pigs.  Stating the methods of deworming pigs. | Weeds used to feed pigs.  A bottle A chart  showing one  deworming |  | -do- |

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|  |  |  |  |  |  |  | proper weaning of pigs.  Identifying the methods of deworming piglets. |  |  |  |  |  |
|  |  |  | **Heat period** |  | Discussing the signs of heat period | Writing sentences about gestation period and steaming up. | Definition of heat period.  Mentioning signs of heat in a sow.  Definition of gestation period, steaming up.  Identifying the gestation period of a sow and advantages of steaming up. |  | Discussing signs of heat in a sow. | -do- |  | Comp pri sci bkg pg45 - 49 |
|  |  |  | **Diseases and parasites** |  | Identifying diseases and parasites of pigs | Writing signs and symptoms of pig diseases on a farm | Naming the diseases and parasites of pigs. Identifying the causes of pig diseases.  Stating the signs and symptoms of pig diseases.  Suggesting the mode of spread of each disease.  Identifying their prevention, control and treatment. |  | Listing the diseases and parasites of pigs.  Discussing the signs and symptoms of pig diseases.  Discussing ways of controlling diseases and parasites. | Pupils text books |  | Comp pri sci bk5 pg 47-49  MK int pri sci bk 5 pg98 -100 |

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|  |  |  | **Starting a piggery project** |  | Describing factors to consider when starting a piggery project. | Naming examples of farm records. | Factors to consider when starting a piggery project.  Factors to consider when selecting a good piglet to rear.  Factors affecting piggery industry.  Farm records (definition)  Examples and importance of keeping farm records. |  |  | -do- |  | Comp pri sci bk 5 pg42 – 43  MK Int pri sci bk5 pg96 – 98 |
|  |  | **The Human health** | **Food and nutrition** |  | The learner;  Explains what breastfeeding is, its advantages and disadvantages  Explains what bottlefeeding is , its advantages and disadvantages  Identifies vulnerable groups of people  Explains traditional customs and their advantages and disadvatnages to the community | The learner  Lists the food for different communities  Recites poems and sings songs on breastfeeding  Writes food diets for the vulnerable people.  Explains some dishes for the vulnerable | 1. Breastfeeding   What it is  Advantages and disadvantages to;  The mother, the baby, the family   1. Bottle feeding   What is it  Advantages and disadvantages to;  The mother, the baby, the family   1. Vulnerable groups of people |  | Writing advantages and disadvantages of breastfeeding to the mother, baby and family.  Explaining instances when bottle feeding is necessary.  Listing different vulnerable groups of people. | Chalk board illustration |  |  |

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|  |  |  |  |  |  |  | Who they are  Weaning babies, the sick, elderly, convalescents, breastfeeding mothers and their breastfed babies, pregnant mothers and their unborn babies   1. Food for the vulnerable   Soft drinks, soft foods, balanced diet   1. Traditional customs and food taboos in communities   What taboos are Examples  Effects of food taboos on nutrition  1. Food  consumption patterns in the community  Staple foods of different communities  Other foods of different communities |  |  |  |  |  |

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|  |  |  | **Primary Health Care (PHC)** |  | The learner;  Describes what PHC is, its elements and principles.  Demonstrates activities of PHC in promotion of community hygiene  Explains the responsibilities of individuals, families and communities in health promotion | The learner  Describes what PHC is, its elements and principles.  Listens to stories about PHC activities in the community.  Writes words, sentences and stories about PHC activiteis in the community. | 1. Primary Health Care   What it is  Elements and principles of PHC   1. PHC activities in promotion of community hygiene   e.g. rubbish disposal  Protecting water sources   1. Responsibility of individuals, families and the community in health promotion. 2. Suitable lifestyles and good health practices 3. People with special needs in community e.g. the sick, the elderly, the disabled, the young. 4. Care for people with special needs   e.g. protection, medication |  | Describing PHC, its elements and principles.  Practicing activities of PHC in the community  Demonstrating the responsibilities of individuals, families and community in health promotion  Naming people with special needs in the community.  Discussing how to care for people with special needs | Chalkboard illustration  Reference books  The local environment |  |  |