



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

CURRICULUM AND ASSESSMENT POLICY STATEMENT GRADE R-5 FOR LEARNERS WITH SEVERE INTELLECTUAL DISABILITY

AGRICULTURAL STUDIES

GRADE 4-5

Curriculum and Assessment
Policy Statement Grade R-5
for learners with Severe
Intellectual Disability

2018 Orientation

Learning programme

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1 SECTION 1

INTRODUCTION

2 SECTION 2:

INTRODUCTION TO AGRICULTURAL STUDIES

2.1 What is Agricultural Studies?

The subject teaches the learner:

- General farming/Agricultural Practices and specifically;
- Plant production
- Gardening (Horticulture)
- Animal Production
- Environmental Practices and
- Business Practices.

The subject provides the basis of the establishment of sustainable farming operations for the learner through the inclusion of a wide spectrum of competencies required by farmers in South Africa. Learners in this subject will gain knowledge and skills necessary for agricultural workers in mixed farming systems whereby enhancing the overall agricultural process and to gain opportunities to access local, national and international agricultural markets.

This subject reflects and addresses an urgent farming industry need to skill its workforce, to produce and maintain high quality farm workers and entrepreneurs in South Africa both now and in the future.

The skills and the content embedded in the skills are taught over two years in Grade 4 and three years in Grade 5. During each year in each grade all the topics are taught, and the teacher is allowed to adapt the difficulty level of the skills to the ability of the learner.

2.2 Topics to be studied in Agricultural Studies

2.2.1 General farming/Agricultural Practices

2.2.2 Plant production i.e. vegetables, fruit trees, herbs

2.2.3 Gardening (Horticulture) i.e. medicinal and indigenous plants, flowering plants

2.2.4 Animal Production i.e. poultry, small stock

2.2.5 Environmental practices

2.2.6 Business Practices including entrepreneurial skills.

2.3 Specific Aims:

The purpose of this subject is to allow new learners' access to the Primary Agricultural Sector with specific reference to Mixed Farming Systems. In Agricultural Studies the learners will study:

2.3.1 Generic Farming/Agricultural Practices which aims to teach learners to:

- Apply safe and secure practices in the agricultural workshop and community
- Select, use and care for hand tools and basic equipment
- Demonstrate an understanding of soil preparation
- Demonstrate an understanding of composting and the benefits of adding organic enrichments to the soil
- Recognise requirements of water in plants
- Identify different methods of irrigation
- Identify and control of weeds, pests and diseases

2.3.2 Plant Production which aims to teach learners to:

- Apply basic food safety practices
- Identify different crops
- Propagate plants from seeds and planting into open ground
- Planting a range of crops according to correct planning, spacing and depth of the plant material
- Irrigate crops to maintain a predetermined moisture content
- Harvest agricultural crops by using basic harvesting tools

2.3.3 Horticulture which aims to teach learners:

- Health and safety in the horticulture industry
- To care for ornamental seedlings
- Plant and establish ornamental plants and trees from containers into open ground
- To understand basic permaculture principles

2.3.4 Animal Production which aims to teach learners to:

- Identify the different breed
- Care for farm animals
- Recognise basic breeding behaviour of farm animals
- Apply basic animal husbandry practices
- Observe, handle and move farm animals
- Recognise defensive behaviour in animals
- Apply standard animal feeding procedures
- Harvest and process animal products
- Understand the process of slaughtering farm animals

2.3.5 Environmental Practices which aims to teach learners to:

- Identify medicinal plants and food from the veld
- Recognise and control invasive plants
- Practically apply soil conservation
- Understand indigenous knowledge using earth signs to plant and harvest
- Comprehend the effect of natural disasters
- Harvest water and understand indigenous knowledge about water

2.3.6 Business practices which aims to teach learners to:

- Apply basic skills in storage and stock taking
- Understand basic costing (income/expenditure)
- Execute entrepreneurship in agriculture

2.4 Requirements for Agricultural Studies as a subject

2.4.1 Time Allocation

The compulsory instructional time for the Vocational Learning Programme for learners experiencing severe intellectual disabilities amounts to 8 hours per 5-day cycle. Schools may offer either three (3) or four (4) vocational subjects, depending on the number of learners in the school and the resources available. The compulsory instructional time for **Agricultural Studies** is either:

- 2 hours per 5-day cycle plus three (3) other vocational subjects or

- 2,5 hours per 5-day cycle plus two (2) other vocational subjects.

Twenty percent (20%) of the above mentioned time is utilized to teach subject content which should be embedded in teaching the learners to execute the skills. This implies that theoretical lessons should not be instructed in isolation, but during the teacher's demonstration that takes place before the learners practise the skills. The learners are required to utilize eighty percent (80%) of the time to practise the various skills in the classroom. The Agricultural Studies periods should be divided into two (2) timeslots.

2.5 Resources

Learners must have the following resources:

- 1 x A4 file or exercise book
- Stationery; pen, pencil, ruler, etc.

An appropriately qualified teacher registered with SACE in line with the Collective Agreement 5 of 2001 is required to teach Agricultural studies.

2.5.1 Infrastructure

- Classroom to accommodate 15 learners with a storeroom or garden shed to store gardening tools and animal feed
- Storage facility – potentially hazardous chemical and all machinery and equipment must be stored securely (consumable equipment, petrol/diesel and hand/power tools, must be locked away with no access to learners)
- Available land to cultivate and/or land for grazing

2.5.2 Equipment

To teach 15 learners the following minimum infrastructure and equipment is required:

- Safety equipment: masks - 15
safety goggles - 15
helmets – 15

Signage: Warning signs/safety rules (required by Health and Safety act) and information signage must be displayed on posters in the workshop, e.g. to label seed beds

- Protective clothing: gloves – one per learner
boots – one pair per learner

overalls – one per learner

- Consumables: seeds/seedlings
 - seed trays/potting bags
 - potting soil/compost/topsoil
 - animal drench – dewormer for endo-parasites
 - animal dip – for ecto-parasites
 - fuel and two-stroke fuel mix – for generator, lawnmower, weedeater, bakkie
 - chainsaw bars and chains as needed
- Livestock: as needed according to region
- Basic hand tools: spades - 10
 - forks - 10
 - rakes - 10
- Optional extras: hoes
 - watering cans - 4
 - planting lines – 4 (can be made with available material)
 - wheelbarrows - 4
 - hosepipe – 2 x 30m
 - irrigation systems
 - spray pumps (knap sack) - 4
 - pruning shears - 10
 - wire pullers - 2
- Power tools: petrol lawnmowers - 2
 - brush cutter (weed eater) – 2
 - drill – 1
 - generator – to operate power tools if in the field
- Basic maintenance tools, e.g. screw drivers, hammers, pliers and spanner (Gedore) set to do repair work
- Transport: bakkie and tractor for moving produce/animals (these vehicles are only necessary if farming on large scale)

2.5.3 Finances

Agriculture is a subject that requires ongoing financial support and regular resourcing for the purpose of completion of practical tasks and work to be carried out. Resourcing could be sub-divided into the following categories:

- Safety equipment
- Protective clothing
- Consumables

- Livestock
- Tools and equipment
- Power tools
- Maintenance tools
- Vehicles – 1 x bakkie
1 x tractor
(these vehicles are only necessary if farming on large scale)

The school must provide a budget for maintenance of all tools and to purchase the following consumable resources as needed.

2.5.4 Stock Control

The teacher is responsible for the stock, and will keep the storeroom/classroom locked at all times when not present in the storeroom/classroom.

Annual stock control is essential and should be undertaken at the last week of each year.

A stock inventory must be maintained by the teacher and verified annually by a Senior Management Team member.

2.6 Career opportunities

The learners' knowledge and skills enables him/her to fulfil the following career opportunities:

- Work for a garden service
- Work in private gardens
- Work as general worker within agricultural sector
- Emerging small scale farmer
- Small/micro entrepreneur

3 SECTION 3:

OVERVIEW OF TOPICS PER TERM AND ANNUAL TEACHING PLANS

Each week has a compulsory contact time of 2 or 2,5 hours (depending on the number of vocational subjects offered at the school) for the subject **Agricultural Studies**.

3.1 Content overview of topics

The content is embedded in the skills and the learners should execute the skills in a simulated working environment recreated in the classroom/centre. The table below indicates the topics and content in the **Agricultural Studies** learning programme in grade 4 and 5 with differentiation

TOPIC	Grade 4	Grade 5
General Farming	<p>Apply safe and secure practices in the agricultural community</p> <p>Apply basic and general safety practices</p> <p>Identify and maintain fencing for different farming practices</p> <p>Use and care for hand tools and basic equipment for agricultural tasks</p> <p>Observe the properties of soil</p> <p>Assist in the process of soil preparation and composting</p> <p>Apply natural fertilization of soil</p> <p>Recognise the roles and requirements of water in plants</p>	<p>Apply safe and secure practices in the agricultural community</p> <p>Apply basic and general safety practices</p> <p>Operate in a team in an agricultural environment</p> <p>Prepare, erect and maintain wire fencing for different farming practices</p> <p>Select, use and care for hand tools and basic equipment for agricultural tasks</p> <p>Demonstrate an understanding of or explain the properties of soil</p> <p>Demonstrate an understanding of soil preparation, composting and the benefits of adding organic enrichments to the soil</p> <p>Apply natural and chemical fertilization of soil</p> <p>Describe and recognise the roles and requirements of water in plants</p>

	<p>Identify weeds, understand and assist in manual control of weeds</p> <p>Identify insects that have an impact on crops</p>	<p>Identify different methods of irrigation appropriate to environmental circumstances and installing of irrigation if appropriate</p> <p>Identify and understand manual and chemical weed control</p> <p>Identify limitation factors like insects, pests and diseases and the damage it can cause</p> <p>Understand the application of natural and agrochemical products in a safe, effective and responsible manner with consideration of the environment</p>
Plant Production	<p>Apply basic food safety practices</p> <p>Identify different crops</p> <p>Assist in the planting of seedlings according to correct spacing and depth of the plant material</p> <p>Assist in the irrigation of crops</p> <p>Assist in harvesting agricultural crops by using basic harvesting tools</p>	<p>Apply basic food safety practices</p> <p>Identify, describe and understand different crops</p> <p>Propagate plants from seeds, cuttings and grafting and planting into open ground</p> <p>Plant a range of crops according to correct planning, spacing and depth of the plant material</p> <p>Handle planting material correctly for the successful establishment of a specific crop</p> <p>Irrigate crops to maintain a predetermined moisture content</p> <p>Harvest agricultural crops by using basic harvesting tools</p> <p>Demonstrate an understanding of crop preservation</p>
Gardening/	<p>Understand health and safety in the horticulture industry</p>	<p>Understand health and safety in the horticulture industry</p>

Horticulture	<p>Assist in care for ornamental seedlings</p> <p>Assist in mowing lawns in landscape areas</p> <p>Assist in basic permaculture principles</p> <p>Assist in manipulating plants using pre-determined methods and techniques</p>	<p>Propagate plants from seeds and planting into open ground</p> <p>Care for ornamental seedlings</p> <p>Propagate, plant and establish ornamental plants and trees from containers into open ground</p> <p>Mow lawns and cut trees in landscape areas</p> <p>Understand, explain and apply basic permaculture principles</p> <p>Manipulate plants using pre-determined methods and techniques</p>
Animal Production	<p>Identify and observe a selection of different breeds of farm animals</p> <p>Care for small breeds of farm animals:</p> <ul style="list-style-type: none"> - poultry - goats or sheep or pigs <p>Demonstrate an understanding of healthy farm animals</p> <p>Apply basic animal husbandry practices</p> <p>Observe and assist the handling and moving of small breeds of farm animals</p> <p>Recognise defensive behaviour in animals</p> <p>Assist in applying standard animal feeding</p>	<p>Identify and observe the different breeds of farm animals</p> <p>Care for farm animals</p> <ul style="list-style-type: none"> - Cattle breeds: beef dairy <p>Demonstrate an understanding of healthy farm animals and their purpose on a farm</p> <p>Recognise basic breeding behaviour of farm animals</p> <p>Apply basic animal husbandry practices</p> <p>Observe, handle and move of farm animals</p> <p>Recognise defensive behaviour in animals</p> <p>Apply standard animal feeding procedures</p>

	<p>procedures</p> <p>Assist in harvesting animal products</p>	<p>Harvesting and processing of animal products</p> <p>Demonstrate an understanding of preparing animals for slaughtering and observe the processing of products from slaughtered farm animals</p>
<p>Environ- mental Practices</p>	<p>Know Healthy Living: medicinal plants</p> <p>Understand nature and Biodiversity: invasive plant control</p> <p>Know indigenous knowledge using earth signs to plant and harvest</p> <p>Know how to use water harvesting</p>	<p>Know Healthy Living: food from the veld</p> <p>Know Nature and Biodiversity: soil conservation</p> <p>Know the effect of natural disasters</p> <p>Know how to use indigenous knowledge about water</p>
<p>Business Practises</p>	<p>Apply basic skills in storage management</p> <p>Assist in basic entrepreneurial activities in agriculture</p>	<p>Apply basic skills in storage management and stocktaking</p> <p>Understand basic costing (income/expenditure)</p> <p>Understand entrepreneurship in agriculture</p>

3.2 Content outline per term

Each term comprises of ten (10) weeks and a minimum of nine (9) **practical sessions** are compulsory. The sequence within the term is not compulsory and the teacher may cover the learning content and skills in any appropriate sequence. Learners spend two years in Grade 4 , and therefore activities are provided for each week to allow the learners to perform the second suggested **activity** during their second year in grade 4. Visits to farms allow the learners to experience activities on farms first hand and during these visits a variety of activities can be viewed and experienced by the learners.

The Occupational Health and Safety (OHS) Act 85 of 1993 requires the teacher to comply with the safety regulations when issuing equipment and tools to the learners and the teacher may not leave learners unattended during Agricultural Studies instructional time. A group discussion on the safety precautions that must be followed during all the instructional time is compulsory. Learners with a severe intellectual disability are not always able to make abstract judgements, and they are often not able to apply learned knowledge from one topic to the next. Impulsive behaviour as well as the inability to make fast decisions can easily lead to learners finding themselves in, or being exposed to dangerous situations.

3.2.1 Grade 4 Term 1

All objectives must be achieved but the order of lesson presentation may differ according to agricultural circumstances.

Grade 4 Term 1			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
1	General Farming	<p><u>Apply basic and general safety practices</u></p> <ol style="list-style-type: none"> 1. Apply personal hygiene 2. Understand what basic food safety practices are 3. Identify and apply the safety measure regarding the use of basic agricultural tools and equipment 4. Understand the basic hygienic requirements of dealing with organic food 5. Understand the importance of protective clothing <p><u>Apply safe and secure practices in the agricultural community</u></p> <ol style="list-style-type: none"> 1. Identify potential safety and security hazards in the immediate environment, community or on a farm 2. Understand the issues around community policing 3. Understand safety practices regarding fertilizer and cleaning materials 	<p>Gr 4 : 1st year</p> <ul style="list-style-type: none"> • Teacher explains reasons for personal hygiene • Use chart with hand wash techniques – learners practically all wash hands, copying demonstration and example of teacher • Discuss, name and demonstrate the safe handling of basic hand agricultural tools and equipment and the dangers associated with its use • Learners practice through getting small tasks to do – weed general garden using handheld tools. After use they must be able to properly clean and store tools, explain with use of pictures/drawings to indicate space of tools in storage – learners assist in placing tools in place • Observe and discuss different spoilt food products on hand of examples, i.e., mould, yeast, changes of food colour, texture, flavour and/or smell. Allow Learners practically to use their senses – touch, feel, smell and taste where possible. • Discuss reasons for cleaning equipment. As an experiment use dirty equipment on food products, leave for a day or two for learners to observe the change in product • Identify and name protective clothing (boots, overalls, etc), Practice to dress and fit protective clothing correctly, continue with activities needed for next activity. Pack away clothing in correct way (folded or

Grade 4 Term 1			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p>hanged) in space in storeroom</p> <ul style="list-style-type: none"> • Walk around school/work area, point out and discuss potential safety and security hazards • Explain about community policing using a clip from internet • Point out safety practices regarding the use/storage of fertilizers and cleaning materials <p>*Teacher's tip: Learners start a garden file/book for keeping records and worksheets, decorate and cover with leaf prints as a creative activity – pointing out different shapes of leaves</p> <p>Gr 4 : 2nd year</p> <ul style="list-style-type: none"> • Discuss reasons for personal hygiene with learners • Learners practice hand wash techniques, learners in year 2 explain to learning in year 1 what they are doing, using the hand wash chart as resource • Discuss, name and demonstrate the safe handling of basic hand agricultural tools and equipment and the dangers associated with its use. Learners practice through getting small tasks to do – weed own vegetable plot in garden using specific tools or complete task needed for continuous maintenance. After use they must be able to properly clean and store tools, explain with use of pictures/drawings to indicate space of tools in storage – learners assist in placing tools in place • Identify and name different spoilt food products on hand of examples,

Grade 4 Term 1			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p>i.e., mould, yeast, changes of food colour, texture, flavour and/or smell. Discuss reasons for cleaning equipment.</p> <ul style="list-style-type: none"> • Fit protective clothing (boots, overalls, etc), Practice to dress and fit protective clothing correctly, continue with activities needed for next activity. Pack away clothing in correct way (folded or hanged) in space in storeroom • Walk around school/work area, learners is encouraged to point out and discuss potential safety and security hazards • Explain about community policing using a clip from internet, allow learners to discuss and question incidents • Point out safety practices regarding the use/storage of fertilizers and cleaning materials <p>*Activity for enrichment – visit a garden in the community within walking distance, indicating and discussing the dangers</p>
2	General Farming	<p><i>The learner must be able to</i></p> <p><u>Use and care for hand tools and basic equipment for agricultural use:</u></p> <ol style="list-style-type: none"> 1. Demonstrate different uses of tools one or two at a time 2. Understand safety measures regarding the use of basic agricultural tools and equipment 	<p>Gr 4 : 1st year</p> <ul style="list-style-type: none"> • Identify and name agricultural tools for consolidation (linking activity to week one). Demonstrate on how to use basic hand tools (spade and fork) and the dangers associated with its use • Discuss the safety measure using tools while demonstrating • Practice through getting small task to do – prepare to dig over shared plot in garden using spade and fork appropriately (let plot rest until permaculture and/or planting is introduced)

Grade 4 Term 1			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		3. Demonstrate how to care for and maintain tools and equipment 4. Select the appropriate tool for use in a specific task 5. Participate in correct methods to store tools and equipment correctly and safely <u>Sustain all agricultural practices needing continuous maintenance</u>	<ul style="list-style-type: none"> • Draw or identify pictures/drawings to indicate space of tools in storage • Clean and store tools <p>*Teacher's tip: Teacher assists learners to identify 2m X 1m plot per four learners to fulfil their practical skills – learners identify on a simple map (worksheet) which plot is theirs through colouring it in with green and place it in file</p> <hr/> <p>Gr 4 : 2nd year</p> <p>Demonstration on how to use basic hand tools and the dangers associated with its use continuing to prepare first vegetable patch</p> <ul style="list-style-type: none"> • Draw or identify pictures/drawings to indicate space of tools in storage • Do small tasks and prepare garden using specific tools • Complete worksheet with pictures/drawings to connect tools to specific tasks <p>*Teacher's tip: Teacher assists learners to identify 2m X 1m plot per four learners to fulfil their practical skills – learners identify on a simple map (worksheet) which plot is theirs through colouring it in with green and place it in file</p>
3	Plant Production	<i>The learner must be able to</i> <u>Apply basic food safety practices</u> 1. Apply personal hygiene	<p>Gr 4 : 1st year</p> <p>Learners are shown how to properly wash hands and equipment before and after working with plant products</p> <ul style="list-style-type: none"> • Locate and invite a horticulturist to give a demonstration on the correct

Grade 4 Term 1			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>2. Describe what basic food safety practices are and explain reason for treating of wounds of trees (fruit trees) and shrubs (roses)</p> <p>3. Understand why it is important to remove pruning material and waste from garden according to workplace procedures</p> <p><u>Understand plant anatomy, photosynthesis and respiration</u></p> <p>1. Explain plant anatomy</p> <p>2. Understand photosynthesis and respiration</p> <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p>pruning methods</p> <ul style="list-style-type: none"> • Explain importance of removing pruning material and waste from garden, learners assist in removing materials using protective clothing • Identify the parts of plants in school garden or of a potplant/seedlings bought obtained from nursery • Explain the role each part plays in the plant • Complete worksheet (differentiated according to learners ability) for identifying different plant parts <p><i>Gr 4 : 2nd year</i></p> <ul style="list-style-type: none"> • Learners demonstrate how to properly wash hands and equipment before and after working with plant products • Locate and invite a horticulturist to give a demonstration on the correct pruning methods • Assist with applying treatment to wounds • Learners show learners from year one to assist in removing pruning material and waste from garden after demonstration • Identify the parts of plants and explain the role each part plays in the plant • Complete worksheet (differentiated according to learners ability) for identifying different parts • Explain photosynthesis and respiration using a chart
4	Gardening/Horticulture	<p><i>The learner must be able to</i></p> <p><u>Understand health and safety in the</u></p>	<p><i>Gr 4with differentiation: 1st year</i></p> <ul style="list-style-type: none"> • Demonstrate with available clothes and equipment

Grade 4 Term 1			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<u>gardening/horticulture industry</u> 1. Explain the importance of protective clothing 2. Demonstrate how to dress 3. Explain how to use equipment and tools safely 4. Explain the reason for good housekeeping 5. Describe and demonstrate the actions that will be taken in an emergency situation 6. Explain the reasons for good housekeeping <u>Sustaining all agricultural practices needing continuous maintenance</u>	<ul style="list-style-type: none"> • Use of chart with visual resources to discuss actions • Explain the benefits of protective gear • Learners use clothes and equipment available whilst assisting in tasks (i.e. weeding, sweeping driveways)
			<i>Gr 4 : 2nd year</i> <ul style="list-style-type: none"> • Demonstrate with available clothes and equipment – learners repeat demonstration to the class • Make use of chart with visual resources to discuss actions • Explain the benefits of protective gear • Learners use clothes and equipment available whilst assisting in tasks(i.e. weeding, tidying storeroom, sweeping driveways)
5	Animal Production	<i>The learner must be able to</i> <u>Identify and observe a selection of different breeds of farm animals</u> 1. Identify the different breeds of farm animals in your area 2. Discuss the visual differences and physical attributes in farm animal species and describe it using own words	<i>Gr 4 : 1st year</i> <ul style="list-style-type: none"> • Observe selection of small breeds of farm animals on a video clip from internet or a dvd • Explain the visual differences in small farm animal breeds • Use a poster or books to identify and describe animals using own words • Learners practically interact with smaller farm animals while feeding animals by hand where possible • Label small breeds of farm animals on a worksheet

Grade 4 Term 1			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		3. Explain the functional purpose of the different farm animal species <u>Sustain all agricultural practices needing continuous maintenance</u>	<i>Gr 4 : 2nd year</i> <ul style="list-style-type: none"> Observe selection of small breeds of farm animals on a video clip from internet or a dvd Explain the visual differences in small farm animal breeds Use a poster or books to identify and describe animals using own words Learners practically interact with smaller farm animals while feeding animals by hand where possible Label small breeds of farm animals on a worksheet
6	Animal Production	<i>The learner must be able to</i> <u>Care for small breeds of farm animals: poultry</u> <ol style="list-style-type: none"> Classification of types of poultry Observe the visual difference, physical attributes, behaviour and movement of animals within each species Explain the functional purpose of the species Identify basic equipment needed for caring of animals Explain different care methods for young animals <u>Sustain all agricultural practices needing continuous maintenance</u>	<i>Gr 4 : 1st year</i> <ul style="list-style-type: none"> Discuss main types of poultry: chickens, ducks, geese, turkeys, ostriches Practical explanation with live animal Use visual resources for discussion Encourage learners to use own words to describe animals Learners interact with animals available on premises or within walking distance from school,, while assisting teacher or older learners to care for animals <i>Gr 4 : 2nd year</i> <ul style="list-style-type: none"> Discuss main types of poultry: Chickens, ducks, geese, turkeys, ostriches (make use of pictures or video clips from internet if animals are not housed on school premises) Practical explanation with live animals (if needed bring an animal to

Grade 4 Term 1			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p>school in a cage)</p> <ul style="list-style-type: none"> • Use visual resources for discussion • Encourage learners to use own words to describe animals • Learners interact with animals while assisting older learners to care for animals, allowing the teacher to observe the process
7	Animal Production	<p><i>The learner must be able to</i></p> <p><u>Demonstrate an understanding of healthy farm animals</u></p> <ol style="list-style-type: none"> 1. Recognise the external signs of good health in farm animals 2. Observe the growth and production rate of animals <p><u>Apply basic animal husbandry practices</u></p> <ol style="list-style-type: none"> 1. Understand the importance or reasons for shelter/housing 2. Identify the different structures needed for housing of different animals 3. Observe applying appropriate bedding material to animal housing for small breeds of farm animals <p><u>Sustaining all agricultural practices needing continuous maintenance</u></p>	<p>Gr 4 : 1st year</p> <ul style="list-style-type: none"> • Discuss the signs of good health in farm animals and the importance of good health for effective productivity • Use a chart indicating observation of growth and production • Use visual resources while discussing the importance, reasons and structures used for shelter/housing structures • Demonstrate the application of appropriate bedding materials <p>Gr 4 : 2nd year</p> <ul style="list-style-type: none"> • Discuss the signs of good health in farm animals and the importance of good health for effective productivity • Use chart indicating observation of growth and production • Use visual resources while discussing the importance, reasons and structures used for shelter/housing structures • Allow learners to demonstrate the application of appropriate bedding materials while teacher is coaching them through questioning

Grade 4 Term 1			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
8	Environmental Practices	<i>The learner must be able to</i> <u>Healthy Living: medicinal plants</u> 1. Identify plants used for healing 2. Discuss what the plants is used for and what parts of plants are used 3. Use correct way of harvesting	<i>Gr 4 : 1st year</i> Ask learners to bring medicinal plants from home or collect a variety of medicinal plants to discuss, i.e. indigenous - buchu, African wormwood, wild willow, hoodia or lavender <ul style="list-style-type: none"> • Demonstrate how plants are used, i.e. tea, ointment • Harvest medicinal plants
		<u>Sustain all agricultural practices needing continuous maintenance</u>	<i>Gr 4 : 2nd year</i> Ask learners to bring medicinal plants from home or collect a variety of medicinal plants to discuss, i.e. indigenous - buchu, African wormwood, wild willow, hoodia or lavender <ul style="list-style-type: none"> • Demonstrate how plants are used, i.e. tea, ointment, beauty products • Teach learners to make a product
9		<i>The learner must be able to</i> <u>Revise and sustain activities taught in previous weeks and agricultural practices needing continuous maintenance</u> 1. Be aware of dangers and hygiene when in agricultural environment 2. Participate in methods to use/store tools, equipment 3. Revise the parts of plants	<i>Gr 4 : 1st year</i> Repeat activities with learners who need more support <ul style="list-style-type: none"> • Explain to all learners importance of storing equipment and maintaining gardening activities when school is closed • Complete a worksheet (differentiated according to learners ability) for identifying different parts of plants after the revision • Make use of drama to identify the different breeds of farm animals • Teacher use question and answer method to revise the types of poultry, also the health and shelter/housing of farm animals • Water garden at regular intervals

Grade 4 Term 1			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		4. Dress correctly in protective clothing 5. Answer questions to identify and care of different breeds of farm animals 6. Revise the types of poultry 7. Revisit the site of farm animals and apply/discuss shelter/housing/bedding 8. Name and harvest medicinal plants	<i>Gr 4 : 2nd year</i> Repeat activities with learners who need more support <ul style="list-style-type: none"> • Explain to all learners importance of storing equipment and maintaining gardening activities when school is closed • Complete a worksheet (differentiated according to learners ability) for identifying different parts of plants after the revision • Make use of drama to make the sounds and identify the different breeds of farm animals • Teacher use question and answer method to revise the types of poultry, also the health and shelter/housing of farm animals • Water garden at regular intervals
10	Assessment	The week allocated to formal assessment should be integrated across the nine (9) weeks planned for teaching and learning. The assessment will consist of practical tasks with 80% weighting and informal theoretical assessment with 20% weighting. <u>Sustain all agricultural practices needing continuous maintenance</u>	

Assessment

Assessment is formally recorded during four (4) practical sessions with a minimum of four (4) skills reported. Learners, regardless of abilities, shall be assessed on the same skill. The following serves as suggestion of skills to record and report on.

Gr 4 : 1st year

Week 2	Use basic hand tools – spade & fork
Week 3	Identify parts of plants
Week 4	Dress in protective clothing
Week 5	Identify and assist with feeding of smaller farm animals
Week 6	Identify and assist with handling of poultry
Week 7	Assist in applying appropriate bedding material
Week 8	Name medicinal plants

Gr 4 : 2nd year

Use basic hand tools – spade, fork & rake
Identify parts of plants
Dress in protective clothing
Feed smaller farm animals
Feed and care for poultry
Apply bedding material on own
Harvest medicinal plants

Four theoretical activities are assessed and recorded, however, a minimum of 1 theoretical activity is reported on. The following serves as suggestions of theoretical activities to report on.

Week 3	Worksheet naming three parts of plants	Worksheet naming different parts of plants
Week 5	Label three small breeds of farm animals on a worksheet	Label six small breeds of farm animals on a worksheet

3.2.2 Grade 4 Term 2

All objectives must be achieved but the order of lesson presentation may differ according to agricultural circumstances.

Grade 4 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
1	General Farming	<u>Apply basic and general safety practices</u>	Gr 4 : 1 st year Discuss: <ul style="list-style-type: none"> • Reasons for personal hygiene • Basic food safety practices and hand wash techniques • Safety measures regarding the use of basic agricultural tools and equipment • Hygienic requirement when dealing with organic food • Importance of protective clothing • Reasons for fencing • Show examples of animal predators and discuss what damage they can cause • Visit areas of different kinds of fencing • Learners observe and assist in practical activities maintaining fencing where needed
		<u>Identify and maintain fencing for different farming practices</u>	Gr 4 : 2 nd year Discuss: <ul style="list-style-type: none"> • Reasons for personal hygiene • Basic food safety practices and hand wash techniques • Safety measures regarding the use of basic agricultural tools and equipment
		<u>Sustain all agricultural practices needing</u>	

Grade 4 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<u>continuous maintenance</u>	<ul style="list-style-type: none"> Hygienic requirement when dealing with organic food Importance of protective clothing Reasons for fencing Show examples of animal predators (note what they do – climb, burrow, fly, scratch) and discuss what damage they can cause Visit areas of different kinds of fencing Do practical activities maintaining fencing in different areas Class collect pictures of more examples of local predators
2	General Farming	<p><i>The learner must be able to</i></p> <p><u>Observe the properties of soil</u></p> <ol style="list-style-type: none"> 1. Define soil structure and properties 2. Understand the qualities and uses of different soil types 3. Recognise the difference between topsoil and subsoil 4. Identify life in the soil study 5. Participate in separating topsoil from subsoil 6. Know how soil is formed <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p><i>Gr 4 : 1st year</i></p> <ul style="list-style-type: none"> Do soil in bottle experiment to show learners the different layers and types of soil Practical explanations, demonstrations and discussion Poster of different layers of soil Learners investigate a sample of fresh, moist compost with a magnifying glass in groups, identifying each creature and ticking of those found on a worksheet Learners partake in experiment of making soil or sand using stones <p><i>Gr 4 : 2nd year</i></p> <ul style="list-style-type: none"> Each learner do a soil in bottle experiment with soil, from their own gardens or different parts of the school property, to identify the different layers and types of soil Practical explanations, demonstrations and discussion Learners make a poster of different layers of soil with samples from practically digging a hole

Grade 4 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> Complete worksheet with pictures labelling different kinds of soil Explain the cycle of decomposition on hand of a picture graph
3	General Farming	<p><i>The learner must be able to</i></p> <p><u>Assist in the process of soil preparation and composting</u></p> <ol style="list-style-type: none"> Demonstrate an understanding of soil preparation Explain what stockpiling of topsoil is and why it is important Explain why we till and dig before planting Use hand held tools and implements for the effective preparation of soil <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p><i>Gr 4 : 1st year</i></p> <ul style="list-style-type: none"> Use picture graphs to assist in explaining the process Practical explanation and demonstration of process Select an area where learners can practically participate in completing the process of tilling and digging
			<p><i>Gr 4 : 2nd year</i></p> <ul style="list-style-type: none"> Picture graphs to assist in explaining the process, learners to do part of the explanations Practical explanation and demonstration of process Practical participation by learners in completing the process of tilling and digging Discuss the problems that can be caused by overdoing the process of tilling and digging and the benefits of not doing it
4	General Farming	<p><i>The learner must be able to</i></p> <p><u>Assist in the process of soil preparation and composting</u></p> <ol style="list-style-type: none"> Understand the reason for composting Understand the process of making of compost Assist in the process of making compost 	<p><i>Gr 4 : 1st year</i></p> <ul style="list-style-type: none"> Visit sites where different ways of composting is practiced Practical explanation while learners observe Make a sample of each way of composting while learners assist Learners gather available materials and assist in making compost heaps <p>Learners make or assist and use hand tools in making compost heaps depending on space available</p>

Grade 4 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>4. Observe different ways composting, i.e. trench, bin, pile</p> <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p><i>Gr 4 : 2nd year</i></p> <ul style="list-style-type: none"> • Visit sites where different ways of composting is practiced • Learners divide into groups. Each group to demonstrate choice of composting -explaining what they do while others observe • Learners choose the correct tool to assist in making compost and gather available material to make the compost heaps • Learners keep compost heap wet and turn material correctly • Learners complete a poster in their group explaining the process
5	Plant Production	<p><i>The learner must be able to</i></p> <p><u>Identify different crops and/or fruit cultivars</u></p> <ol style="list-style-type: none"> 1. Identify the important local crops and fruit cultivars used in the community/or fruit cultivars 2. Identify various examples of crop or fruit according to physical and handling characteristics 3. Demonstrate an understanding of climatic requirements for growing crops and/or fruit cultivars suitable for region <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p><i>Gr 4 : 1st year</i></p> <ul style="list-style-type: none"> • Visit a community garden or a farm to identify crops and/or fruit cultivars • Poster with illustrations of crops and/or fruit cultivars • Find pictures in magazines to match illustrations of crops/fruit on poster • Complete worksheet grouping vegetables and fruit separately <p><i>Gr 4 : 2nd year</i></p> <ul style="list-style-type: none"> • Visit a community garden or farm to identify crops and/or fruit cultivars in natural environment • Learners to bring examples of different crop or fruit species found in area they are living • Learners work in groups of four making a poster with illustrations of crops and/or fruit cultivars either through drawings of their own or by finding pictures in magazines • Complete worksheet labelling different crops or fruit cultivars
6	Gardening/Horticulture	<i>The learner must be able to</i>	<i>Gr 4 : 1st year</i>

Grade 4 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<u>Assist in mowing lawns in landscape areas</u> 1. Observe different types of lawn mowers and actions used to operate 2. Explain the preparations necessary for mowing lawn 3. Awareness of wearing protective clothing when mowing a lawn and the dangers associated in using mentioned machines 4. Assist in using a lawn mower 5. Know how to care for and store a lawn mower <u>Sustain all agricultural practices needing continuous maintenance</u>	<ul style="list-style-type: none"> Visit an organisation where different types of lawn mower can be observed Practical demonstration with lawn mower while learners observe While learners are taking turns in using lawnmower under strict supervision other learners can rake and collect grass not caught by lawnmower Practical demonstration of caring and storage of lawnmower <i>Gr 4 : 2nd year</i> <ul style="list-style-type: none"> Practical demonstration with lawn mower while learners observe While learners are taking turns in using lawnmower under strict supervision other learners can rake and collect grass not caught by lawnmower Practical demonstration of caring and storage of lawnmower
7	Animal Production	<i>The learner must be able to</i> <u>Care for small breeds of farm animals: goats or sheep or pigs</u> 1. Observe the visual difference, physical attributes, behaviour and movement of animals within each species 2. Explain the functional purpose of the species 3. Identify basic equipment needed for caring of animals 4. Explain different care methods for young	<i>Gr 4 : 1st year</i> <ul style="list-style-type: none"> Practical explanation with live animals Visual resources for discussion Encourage learners to use own words to describe animal Discuss the signs of good health in farm animals Use chart for indicating observation of growth and production Use visual resources allowing learners to identify different structures used for shelter/housing Learners demonstrate the application of appropriate bedding materials while teachers lead them using questions and answers

Grade 4 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>animals</p> <p><u>Demonstrate an understanding of healthy farm animals</u></p> <ol style="list-style-type: none"> 1. Recognise the external signs of good health in farm animals 2. Observe the growth and production rate of animals <p><u>Apply basic animal husbandry practices</u></p> <ul style="list-style-type: none"> • Identify the different structures needed for housing of different animals • Observe applying appropriate bedding material to animal housing for small breeds of farm animals <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p><i>Gr 4 : 2nd year</i></p> <ul style="list-style-type: none"> • Practical explanation with live animals • Visual resources for discussion • Encourage learners to use own words to describe animals • Discuss the signs of good health in farm animals • Use chart for indicating observation of growth and production • Use visual resources allowing learners to identify different structures used for shelter/housing • Older learners demonstrate the application of appropriate bedding materials to younger learners
8	Environmental Practices	<p><i>The learner must be able to</i></p> <p><u>Understand Nature and Biodiversity: invasive plant control</u></p> <ol style="list-style-type: none"> 1. Identify and name invasive plants 2. Explain the impact of invasive alien plants on 	<p><i>Gr 4 : 1st year</i></p> <ul style="list-style-type: none"> • Use a poster to identify and name invasive plants • Visit areas on or around school grounds, or an area in the community to identify invasive plants after discussing and naming the plants • Teacher demonstrate on how to remove invasive plants on premises or in nearby vicinity while learners assist

Grade 4 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		nature 3. Remove invasive plants in area <u>Sustaining all agricultural practices needing continuous maintenance</u>	<i>Gr 4 : 2nd year</i> <ul style="list-style-type: none"> Use poster for learners to identify and name invasive plants Visit areas on or around school grounds, or an area in the community to remove invasive plants Learners practically remove invasive plants on premises or in nearby vicinity
9		<i>The learner must be able to</i> <u>Revise and sustain activities taught in previous weeks and agricultural practices needing continuous maintenance</u> <ol style="list-style-type: none"> Observe, report and assist in practical activities maintaining fencing where needed Separate topsoil from subsoil and name samples of different soil types Dig over bed and prepare bed for permaculture process Place composting material with correct composting process according to verbal instruction and dig over materials Name different cultivars/crops and connect cultivars/crops to plant or tree Prepare area for mowing, rake and collect grass Name different animals and apply bedding 	<i>Gr 4 : 1st year</i> <ul style="list-style-type: none"> Observe and report fencing where needed Separate topsoil from subsoil Dig over bed Place composting material with correct composting process according to verbal instruction Name different cultivars/crops Prepare area for mowing Name different farm animals discussed Identify invasive plants <i>Gr 4 : 2nd year</i> <ul style="list-style-type: none"> Assist in practical activities maintaining fencing where needed Name samples of different soil types Prepare bed for permaculture process Dig over composting material in correct way Connect cultivars/crops to plant or tree Rake and collect grass after mowing Apply bedding materials for animals correctly

Grade 4 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		materials correctly 8. Identify invasive plants and remove invasive plants	<ul style="list-style-type: none"> Remove invasive plants
10	Assessment	The week allocated to formal assessment should be integrated across the nine (9) weeks planned for teaching and learning. The assessment will consist of practical tasks with 80% weighting and informal theoretical assessment with 20% weighting. <u>Sustain all agricultural practices needing continuous maintenance</u>	

Assessment

Assessment is formally recorded during four (4) practical sessions with a minimum of four (4) skills reported. Learners, regardless of abilities, shall be assessed on the same skill. The following serves as suggestion of skills to record and report on.

	<i>Gr 4 : 1st year</i>	<i>Gr 4 : 2nd year</i>
Week 2	Observe and report fencing where maintenance is needed	Assist in practical activities maintaining fencing where needed
Week 3	Separate topsoil from subsoil	Name samples of different soil types
Week 4	Dig over bed	Prepare bed for permaculture process
Week 5	Place composting material with correct composting process	Dig over composting material in correct way
Week 6	Name different cultivars/crops	Connect cultivars/crops to plant or tree
Week 7	Prepare area for mowing	Rake and collect grass after mowing
Week 8	Name different farm animals discussed	Apply bedding materials for animals correctly

Four theoretical activities are assessed and recorded, however, a minimum of 1 theoretical activity is reported on. The following serves as suggestions of theoretical activities to report on.

Week 2	Tick off creatures found, on worksheet	Label different kinds of soil
Week 5	Complete worksheet grouping vegetables and fruit separately	Complete worksheet labelling different crops or fruit cultivars

3.2.3 Grade 4 Term 3

All objectives must be achieved but the order of lesson presentation may differ according to agricultural circumstances.

Grade 4 Term 3			
WEEK	TOPIC	CONTENT	Techniques, activities, resources and process notes
1	General Farming	<i>The learner must be able to</i> <u>Apply basic and general safety practices</u>	<i>Gr 4 : 1st year</i> Discuss: <ul style="list-style-type: none"> • Reasons for personal hygiene • Basic food safety practices and hand wash techniques • Safety measures regarding the use of basic agricultural tools and equipment • Hygienic requirement when dealing with organic food • Importance of protective clothing
		<u>Natural fertilization of soil</u> <ol style="list-style-type: none"> 1. Understand nutritional needs and deficiencies in plants 2. Identify the reason for fertilizing crops 3. Prepare natural fertilizers with plant material 4. Explain the purpose of a worm farm 5. Apply natural fertilizer to a crop 	<ul style="list-style-type: none"> • Experiment with three different vegetable plots planted with the same seedlings. One treated with natural fertilizer, one only being watered and one getting no attention. • Practical sessions of making different kinds of natural fertilizers • Set up a simple worm farm using materials available
		<u>Sustain all agricultural practices needing</u>	<i>Gr 4 : 2nd year</i> Discuss: <ul style="list-style-type: none"> • Reasons for personal hygiene • Basic food safety practices and hand wash techniques • Safety measures regarding the use of basic agricultural tools and equipment • Hygienic requirement when dealing with organic food

Grade 4 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<u>continuous maintenance</u>	<ul style="list-style-type: none"> Importance of protective clothing Experiment with three different vegetable plots planted with seedling. One treated with natural fertilizer, one only being watered and one getting no attention. Practical sessions of making different kinds of natural fertilizers Explain the need of maintaining a worm farm Each learner set up a simple worm farm with three 5litre ice-cream tubs
2	General Farming	<p><i>The learner must be able to</i></p> <p><u>Recognise the roles and requirements of water in plants</u></p> <ol style="list-style-type: none"> Understand the functions that water plays in the growth and development of plants Identify the water requirements of different plants Select the right method of watering and the correct time of day to water plants <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p><i>Gr 4 : 1st year</i></p> <ul style="list-style-type: none"> Explain how the amount of water and the frequency of watering influences the growth of a plant - do experiment in class with a set of similar pots with seedlings Discussions with help of resources like books or posters Use different equipment to water garden, including innovative recycling materials – i.e. watering can, bottle, bucket Learners complete worksheet matching different watering equipment Learners take turns to water garden at regular intervals <p><i>Gr 4 : 2nd year</i></p> <ul style="list-style-type: none"> Discuss the water requirements of different plants using the garden and pot plants as examples Explain reasons for the correct time of day to water plants using pictures as resources Discuss different equipment used to water garden; watering can,

Grade 4 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			hosepipe, etc <ul style="list-style-type: none"> • Explain importance of not spraying too strongly with equipment • Complete worksheet naming different watering methods • Learners irrigate the crops which were planted. Turns are made so as to give all a chance
3	Plant Production	<i>The learner must be able to</i> <u>Assist in the planting of seedlings according to correct spacing and depth of the plant material</u> 1. Assist in using tools correctly for every specific crop 2. Assist in using equipment correctly in order to space plants According to the requirements of the specific crop 3. Explain intercropping and companion planting when planting in a small area 4. Understand handling seedlings correctly for successful establishment of specific crops <u>Sustain all agricultural practices needing continuous maintenance</u>	<i>Gr 4 : 1st year</i> <ul style="list-style-type: none"> • Use poster with illustrations of tools to explain tools • Demonstrate how to use equipment correctly • Use available tools for process • Practical demonstration of companion planting • Learners individually plant seedlings in own plot using companion planting
			<i>Gr 4 : 2nd year</i> <ul style="list-style-type: none"> • Use poster with illustrations of tools to explain tools • Demonstrate how to use equipment correctly • Use available tools for process • Practical demonstration of intercropping • Learners individually plant seedlings in plots using intercropping
4	Plant Production	<i>The learner must be able to</i> <u>Assist in the irrigation of crops</u> 1. Explain water requirements of different plants	<i>Gr 4 : 1st year</i> <ul style="list-style-type: none"> • Discuss water requirements • Experiment on what will happen if plants are watered too much or too little

Grade 4 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		2. Assist in selecting the right method of watering plants 3. Explain the correct time of day to water plants 4. Observe and understand irrigation systems for a specific area <u>Sustain all agricultural practices needing continuous maintenance</u>	<ul style="list-style-type: none"> • Use available watering equipment – watering cans, bottles, buckets, etc • Assist in watering the garden <i>Gr 4 : 2nd year</i> <ul style="list-style-type: none"> • Visit a farm or a garden where different methods of irrigation is used • Discuss an irrigation system that is suitable and affordable to the schools' need: <ul style="list-style-type: none"> - watering cans/containers - hose pipes - sprayers
5	Gardening/ horticulture	<i>The learner must be able to</i> <u>Assist in the care for ornamental seedlings</u> 1. Explain the importance of humidity in the seedling environment 2. Demonstrate how to care for seedlings once they have been planted out <u>Sustain all agricultural practices needing continuous maintenance</u>	<i>Gr 4 : 1st year</i> <ul style="list-style-type: none"> • Use drawings or pictures to discuss environmental conditions • Learners assist in planting ornamental seedlings • Demonstrate and practise how to apply appropriate watering • Use experiment to explain what needs are important for seedlings to survive (one set of plants getting too much water, one too little, one no sunlight and one set in area with correct conditions) <i>Gr 4 : 2nd year</i> <ul style="list-style-type: none"> • Use experiment to explain what needs are important for seedlings to survive (one set of plants getting too much water, one too little, one no sunlight and one set in area with correct conditions) • Learners plant ornamental seedlings on already prepared plots and demonstrate to teacher how to care for and water seedlings correctly

Grade 4 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
6	Gardening/ horticulture	<i>The learner must be able to</i> <u>Assist in basic permaculture principles</u> 1. Explain what the basic principles of permaculture is 2. List the resources available on the site i.e. - grey water harvesting system - permaculture method of planting - compost heaps - rainwater harvesting - ecological pest control	<i>Gr 4 : 1st year</i> <ul style="list-style-type: none"> The importance of available resource is explained Discuss the names and functions of commonly used plants in the permaculture context with examples or pictures Learners observe while teacher demonstrate the basic way of preparing a plot in a small garden for permaculture planting (dig plot over, add manure, cover with wet newspaper and then cover it with dry grass) Teacher plant seedlings while learners observe Worksheet: sort pictures in sequence of process of permaculture planting
		<u>Sustain all agricultural practices needing continuous maintenance</u>	<i>Gr 4 : 2nd year</i> <ul style="list-style-type: none"> The importance of creating or collecting available resource material is explained (i.e. dry grass, old newspapers) Discuss the names and functions of commonly used plants in the permaculture context with examples or pictures Explain the characteristics and life cycles of some soil organisms with charts Complete worksheet: sort pictures in sequence of life cycle of soil organism Learners assist while teacher demonstrate the basic way of preparing a plot in a small garden for permaculture planting (dig plot over, add manure, cover with wet newspaper and then cover it with dry grass) Learners plant seedlings while teacher observe

Grade 4 Term 3			
WEEK	TOPIC	CONTENT	Techniques, activities, resources and process notes
7	Animal Production	<p><i>The learner must be able to</i></p> <p><u>The learner must be able to</u></p> <p><u>Observe and assist the handling and moving of small breeds of farm animals</u></p> <ol style="list-style-type: none"> 1. Observe and explain animal behaviour 2. Demonstrate the ability to move animals in a controlled manner 3. Demonstrate the handling and restraint of an animal 4. Discuss the reasons/importance of handling small farm animals <p><u>Recognise defensive behaviour in animals</u></p> <ol style="list-style-type: none"> 1. Describe anatomical features that are used in defensive behaviour e.g. hooves, fangs, beaks, etc 2. Observe the way in which the animal uses anatomical features in defensive behaviour <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p><i>Gr 4 : 1st year</i></p> <ul style="list-style-type: none"> • Practical explanations using video clips of animal behaviour • Learners assist in practical activities in handling and moving of small breeds of farm animals • Use a agriculture magazines or books/posters/pictures to support the discussion • Learners watch a video of defensive behaviour in animals or visit area on premises where the defensive behaviour of animals is shown to them • Show pictures or videos of injuries caused by animals to highlight the importance of safety when working with animals • Learners act out the behaviour of animals seen on video • Practical participation of learners in handling/moving small breeds while teacher assist
			<p><i>Gr 4 : 2nd year</i></p> <ul style="list-style-type: none"> • Practical demonstrations • Learners partake in practical activities in handling and moving of small breeds of farm animals • Learners watch a video of defensive behaviour in animals or visit a farm where the defensive behaviour of animals is shown to them • Use pictures or videos of injuries caused by animals to highlight the importance of safety when working with animals • Learners act out the behaviour of animals seen on video

Grade 4 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> Learners partake in practical activities in handling and moving of small breeds of farm animals
8	Environmental Practices Business Practices	<p><i>The learner must be able to</i></p> <p><u>Understand community and heritage</u></p> <ol style="list-style-type: none"> Know about indigenous knowledge using earth signs, alignment of the moon and stars, the earth, sun and solar system to plant and harvest Link information to how people in past have utilised indigenous knowledge to determine planting and harvesting <p><u>Apply basic skills in storage management</u></p> <ol style="list-style-type: none"> Observe the importance of a tidy storage space Prepare storage space through cleaning and disinfecting Identify the appropriate space for storage of different equipment <p><u>Assist in basic entrepreneurial activities in agriculture</u></p> <ol style="list-style-type: none"> Understand the differences in quality of 	<p><i>Gr 4 : 1st year</i></p> <ul style="list-style-type: none"> Give samples of earth signs (seasons) utilised when planting and harvesting certain crops Invite an older member of the community who practices this knowledge so speak to learners about subject Discuss and explain how storage space should be organised Assist in organising and tidying storage space Explain reason and show learners why space is allocated for equipment Make use of produce to practically discuss and compare the quality of products Use products and pricelist from an outlet in the community to discuss pricing of a product. Make learners aware of the cost of expenses in the process of cultivating product Discuss the importance of packaging using samples from the industry. Point out what materials are available through implementing recycling to reduce cost Discuss and demonstrate the setting up of a stall <p><i>Gr 4 : 2nd year</i></p> <ul style="list-style-type: none"> Give samples of earth signs (seasons) utilised when planting and harvesting certain crops

Grade 4 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>products and be aware of local preferences</p> <p>2. Compare prices of various outlets to price a products</p> <p>3. Understand the importance of packaging and display of products</p> <p>4. Understand setting up a stall at school to sell produce to parents and local community</p> <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<ul style="list-style-type: none"> • Invite an older member of the community who practices this knowledge so speak to learners • Discuss and explain how storage space should be organised • Learners start organising and tidying storage space with the assistance of teacher • Show learners why space is allocated for equipment if learners struggle to tidy • Make use of produce to practically discuss and compare the quality of products • Use products and pricelist from an outlet in the community to discuss pricing of a product. Make learners aware of the cost of expenses in the process of cultivating product • Discuss the importance of packaging using samples from the industry. Point out what materials are available through implementing recycling to reduce cost • Learners assist in the setting up of a stall
9		<p><u>Revise and sustain activities taught in previous weeks and agricultural practices needing continuous maintenance</u></p> <p>1. Assist in preparing natural fertilizer</p> <p>2. Re-pack worm farm</p> <p>3. Apply natural fertilizer to crops</p>	<p><i>Gr 4 : 1st year</i></p> <p>Repeat activities with learners who need more support</p> <ul style="list-style-type: none"> • Learner assist in preparing natural fertilizer • Learners re-pack a simple worm farm following the instructions of the teacher • Apply natural fertilizer to crops with assistance of teacher • Learners water garden under the supervision of the teacher

Grade 4 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		4. Select the right method of watering/irrigation and the correct time of day to water plants 5. Intercropping and companion planting when planting a small area 6. Care for/plant ornamental seedling 7. Assist in permaculture principles 8. Handle and move of small breeds of farm animals	<ul style="list-style-type: none"> Plant seedlings using companion planting Plant ornamental seedling with assistance of teacher Teachers instruct learner in preparing a plot using basic way of permaculture Learners assist in handling and moving animals
			<i>Gr 4 : 2nd year</i> Repeat activities with learners who need more support <ul style="list-style-type: none"> Prepare natural fertilizer Learners set-up or re-pack a simple worm farm while teacher coach them with questions and answers Apply natural fertilizer to crops Learners water garden Plant seedlings using intercropping planting Plant ornamental seedling Teachers coach learners through question and answer method, in preparing a plot using basic way of permaculture Learners handle and move animals while teacher assist
10	Assessment	The week allocated to formal assessment should be integrated across the nine (9) weeks planned for teaching and learning. The assessment will consist of practical tasks with 80% weighting and informal theoretical assessment with 20% weighting. <u>Sustain all agricultural practices needing continuous maintenance</u>	

Assessment

Assessment is formally recorded during four (4) practical sessions with a minimum of four (4) skills reported. Learners, regardless of abilities, shall be assessed on the same skill. The following serves as suggestion of skills to record and report on.

Gr 4 : 1st year

- Week 1 Re-pack worm farm with assistance
- Week 2 Water garden
- Week 3 Plant seedlings (companion planting)
- Week 4 Discuss water requirements
- Week 5 Plant ornamental seedlings with assistance
- Week 6 Prepare permaculture plot with assistance
- Week 7 Assist in handle and move animals
- Week 8 Tidy storeroom with assistance

Gr 4 : 2nd year

- Prepare natural fertilizer
- Water garden choosing correct equipment
- Plant seedlings (intercropping)
- Discuss irrigation systems
- Plant ornamental seedlings
- Prepare permaculture plot
- Handle and move animals
- Tidy storeroom

Four theoretical activities are assessed and recorded, however, a minimum of 1 theoretical activity is reported on. The following serves as suggestions of theoretical activities to report on.

- Week 4 Worksheet: match different watering equipment Worksheet: name different watering equipment
- Week 6 Worksheet: sequence of process of permaculture planting Worksheet: sort pictures in sequence of life cycle of soil organisms

3.2.4 Grade 4 Term 4

All objectives must be achieved but the order of lesson presentation may differ according to agricultural circumstances.

Grade 4 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
1	General Farming	<p><u>Apply basic and general safety practices</u></p> <ol style="list-style-type: none"> 1. Apply personal hygiene 2. Understand what basic food safety practices are 3. Identify and apply the safety measure regarding the use of basic agricultural tools and equipment 4. Understand the basic hygienic requirements of organic food 5. Understand the importance of protective clothing <p><u>Identify weeds, understand and assist in manual control of weeds</u></p> <ol style="list-style-type: none"> 1. Identify common types of weeds in designated pieces of land (either in general garden or gardens to be or in gardens neglected over a holiday period) 2. Explain the reason for hand or manual control of weeds 	<p>Gr 4 : 1st year</p> <p>Discuss:</p> <ul style="list-style-type: none"> • Reasons for personal hygiene • Basic food safety practices and hand wash techniques • Safety measures regarding the use of basic agricultural tools and equipment • Hygienic requirement when dealing with organic food • Importance of protective clothing <ul style="list-style-type: none"> • Use poster with common types of weed to explain weeds • Discuss weeds • Learners find weeds in garden to match pictures on poster • Match and glue weeds next to drawing on worksheet • Explain reason for weeding and demonstration of manual weeding • Learners participate in manual weeding in already established school garden with supervision as well as in individual plots in group garden <p>*Activity for enrichment: visit or invite specialist from herbarium at museum, etc to identify weeds and point out which ones can be used for gardening enrichment or medicinal purposes</p>

Grade 4 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		3. Assist in manual weeding <u>Sustain all agricultural practices needing continuous maintenance</u>	<i>Gr 4 : 2nd year</i> <ul style="list-style-type: none"> Discuss reasons for personal hygiene Use chart with hand wash techniques Discuss and practical demonstration regarding the use of basic agricultural tools, equipment and protective clothing Identify and name common types of weeds in garden Complete worksheet naming common types of weeds in garden Learners demonstrate and explain manual weeding Practically participation in weeding of individual plots in group garden <p>*Activity for enrichment: visit or invite specialist from herbarium at museum, etc to identify weeds and point out which ones can be used for gardening enrichment or medicinal purposes</p>
2	General Farming	<i>The learner must be able to</i> <u>Identify insects that have an impact on crops</u> <ol style="list-style-type: none"> Recognise different insects Establish which are harmful for specific crops Identify insects that should be protected and are good for crops Understand that all insects have a purpose in an eco-system Control insects manually 	<i>Gr 4 : 1st year</i> <ul style="list-style-type: none"> Collect insects from garden with a net Label different insects using a chart, indicate which insects are harmful ones, let the eco-friendly insect go Complete worksheet, circle eco-friendly insects Discuss the best way to rid garden of harmful insects manually <hr/> <i>Gr 4 : 2nd year</i> <ul style="list-style-type: none"> Collect harmful insect from garden with a net Investigate the insects through a magnifying glass

Grade 4 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<u>Sustain all agricultural practices needing continuous maintenance</u>	<ul style="list-style-type: none"> Identify which insects have which affect (harmful or eco-friendly) on crops/plants in the area Learners produce their own chart, using agriculture magazines (i.e. Farmers Weekly of the Landbou Weekblad) for examples of different insects Complete worksheet: cut out insects and glue on second page in different categories (harmful or eco-friendly) Practically control insects manually
3	Plant Production	<p><i>The learner must be able to</i></p> <p><u>Assist in harvesting agricultural crops by using basic harvesting tools</u></p> <ol style="list-style-type: none"> Understand methods of testing for the maturity, ripeness and correct time for harvesting of the crop Understand changes that take place during the ripening process Assist in identifying and using of basic harvesting tools to harvest specific crops Understand the use, cleaning and storage of basic harvesting tools <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p><i>Gr 4 : 1st year</i></p> <ul style="list-style-type: none"> Demonstrate with examples of different crops allowing learners to have practical experience Use poster to show stages of crops Use sensory cues; sight, smell and touch to be developed, to indicate maturity of fruit Discuss importance of harvesting area being clean from waste material Demonstrate with appropriate tools e.g. machete how to harvest cabbage or scissors to harvest chillies Learners assist in the processes <p><i>Gr 4 : 2nd year</i></p> <ul style="list-style-type: none"> Demonstrate with examples of different crops allowing learners to have practical experience Use poster to show stages of crops

Grade 4 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> • Use of sensory cues; sight, smell and touch to be developed • Discuss importance of harvesting area being clean from waste material • Demonstrate with appropriate tools e.g. machete how to harvest cabbage or scissors to harvest chillies • Learners are divided into groups to actively partake in all the processes of harvesting after discussions
4	Gardening/Horticulture	<p><i>The learner must be able to</i></p> <p><u>Assist in manipulating plants using pre-determined methods and techniques</u></p> <ol style="list-style-type: none"> 1. Observe different methods of pruning shrubs (ornamental plants), hedges and trees 2. Assist in the correct method of pruning a hedge 3. Apply the correct method of pruning ornamental plants <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p><i>Gr 4 : 1st year</i></p> <ul style="list-style-type: none"> • Discuss the timing of pruning, tools to be used and health needs • Invite a horticulturist or pruner to give a demonstration on the correct pruning method for the different plant species (shrub, hedge and trees) • Practical demonstration and learners assist to prune hedge
			<p><i>Gr 4 : 2nd year</i></p> <ul style="list-style-type: none"> • Discuss the timing of pruning, tools to be used and health needs • Invite a horticulturist or pruner to give a demonstration on the correct pruning method for the different plant species (shrub, hedge and trees) • Practical demonstration and learners practise to prune hedge while teacher give advice
5	Animal Production	<p><i>The learner must be a able to</i></p> <p><u>Assist in applying standard animal feeding</u></p>	<p><i>Gr 4 : 1st year</i></p> <ul style="list-style-type: none"> • Describe different types of feed with examples; using own words and focusing on the senses of what it feels, look and smell like

Grade 4 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<u>procedures</u> 1. Observe and select the different types of feed for farm animals 2. Assist in selecting suitable feed for specific animals 3. Assist in preparing and filling feeding and drinking troughs 4. Demonstrate the ability to report on feed levels NB! This is done continuously in all the years, so as to prevent animal mortality <u>Sustain all agricultural practices needing continuous maintenance</u>	<ul style="list-style-type: none"> Practical session where learners assist in feeding animals <p>*Activity for enrichment – a visit by an animal feed consultant/agent will benefit the teaching process</p>
			<p><i>Gr 4 : 2nd year</i></p> <ul style="list-style-type: none"> Describe different types of feed with examples; using own words and focusing on the senses of what it feels, look and smell like Assist in selecting suitable feed for specific animals Assist in preparing and filling feeding/drinking troughs Practical session where learners feed the animals while teacher is guiding them <p>*Activity for enrichment – a visit by an animal feed consultant/agent is advised and will benefit the teaching process</p>
6	Animal Production	<i>The learner must be able to</i> <u>Assist in harvesting animal products</u> 1. Understand which animal products come from which animals 2. Name animal products which are used by man e.g. milk, meat, eggs, manure 3. Describe what the products are used for 4. Understand the correct and various	<p><i>Gr 4 : 1st year</i></p> <ul style="list-style-type: none"> Use poster for description of which animal products come from which animals Visit farm to observe different procedures of harvesting products, i.e. a dairy farm to observe milking of cows or shearing of sheep or visit a butchery to observe the processing of meat Collect eggs in an appropriate manner Explain the importance of the pre-slaughter health status and the

Grade 4 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		procedures for the harvesting of specific animal products: a. milk farm animals b. shear farm animals c. collect eggs 5. Assist in preparing equipment for milking 6. Assist in milking cows and goats <u>Demonstrate an understanding of preparing animals for slaughtering and observe the processing of products from slaughtered farm animals</u> 1. Observe the importance of the pre-slaughter health status 2. Observe the economical age for slaughtering 3. Observe the need for strict health and hygiene with handling products 4. Observe the equipment used in a butchery <u>Sustain all agricultural practices needing continuous maintenance</u>	economical age of slaughtering <ul style="list-style-type: none"> Watch a clip from internet or visit a farm where animals are ready to be sent to an abattoir
			<i>Gr 4 : 2nd year</i> <ul style="list-style-type: none"> Use poster for description of which animal products come from which animals Visit farm to observe different procedures of harvesting products, i.e. a dairy farm to observe milking of cows or shearing of sheep or visit a butchery to observe the processing of meat Practically engage in milking a cow whilst visiting a dairy farm Explain the importance of the pre-slaughter health status and the economical age of slaughtering Watch a clip from internet or visit a farm where animals are ready to be sent to an abattoir
7	Environmental	<i>The learner must be able to</i> <u>Understand resource use: water</u>	<i>Gr 4 : 1st year</i> <ul style="list-style-type: none"> Discuss the water cycle using a poster and identify different sources of natural and manmade structures for storage of water

Grade 4 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
	Practices	<u>harvesting</u> 1. Identify different sources and supply of water needed for irrigation 2. Discuss water scarcity 3. List ways of harvesting water <u>Sustain all agricultural practices needing continuous maintenance</u>	<ul style="list-style-type: none"> Discuss water scarcity and solutions to the problem Find ways of harvesting water on the internet, i.e. pumping water (www.playpumps.org), digging wells, collecting and storing rainwater <p>*Activity for enrichment – erect a commercial rain gauge and record the amount of rain every day</p>
			<p>Gr 4 : 2nd year</p> <ul style="list-style-type: none"> Learners explain the water cycle using a poster and their own words Learners find pictures in magazines of different sources of natural and manmade structures for storage of water Discuss water scarcity and solutions to the problem Find ways of harvesting water on the internet, i.e. pumping water (www.playpumps.org), digging wells, collecting and storing rainwater <p>*Activity for enrichment – every learner make a rain gauge from recycling materials, take it home and record the amount of rain every day. Report back at the end of the month</p>
8	Business Practices	<i>The learner must be able to</i> <u>Apply basic skills in storage management</u> 1. Observe the importance of a tidy storage space 2. Prepare storage space through cleaning and	<p>Gr 4 : 1st year</p> <ul style="list-style-type: none"> Discuss and explain how storage space should be organised to ensure easy access to equipment needed Assist in organising storage space After harvesting of produce, learners assist in making a list of all products roughly on an empty page

Grade 4 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>disinfecting</p> <p>3. Identify the appropriate space for storage of different equipment</p> <p><u>Assist in basic entrepreneurial activities in agriculture</u></p> <p>1. Understand the differences in quality of products and be aware of local preferences</p> <p>2. Compare prices of various outlet to price a products</p> <p>3. Understand the importance of packaging and display of products</p> <p>4. Assist in setting up a stall at school to sell produce to parents and local community</p> <p>5.</p> <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<ul style="list-style-type: none"> Discuss and compare quality of products with products available in retail Discussions and learners assist in practical application of activities regarding packaging and display of products <p><i>Gr 4 : 2nd year</i></p> <ul style="list-style-type: none"> Discuss and explain how storage space should be organised to ensure easy access to equipment needed – involve learners through questions and answers Learners organise storage space with the guidance of the teacher After harvesting of produce, learners make lists of all products on a simple format provided by the teacher Discuss and compare quality of products with products available in retail Learners explain and demonstrate in a practical application of activities regarding storage, packaging and display of products
9		<p><u>Revise and sustain activities taught in previous weeks and agricultural practices needing continuous maintenance</u></p> <p>1. Identify common types of weeds</p> <p>2. Recognise different insects</p>	<p><i>Gr 4 : 1st year</i></p> <p>Repeat activities with learners who need more support</p> <ul style="list-style-type: none"> Discuss weeds using a poster with common types of weeds Label different insects using a chart Use sensory cues to indicate maturity of fruit Learners assist to prune hedge

Grade 4 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		3. Understand methods of testing for maturity and ripeness of fruit 4. Assist in the correct method of pruning a hedge or ornamental plants 5. Observe and select different types of feed for farm animals 6. Understand which animal products come from which animal 7. Identify different sources and supply of water needed for irrigation 8. Observe the importance of a tidy storage space	<ul style="list-style-type: none"> Describe different types of feed with examples Description of which animal products come from which animals Identify different sources of natural and manmade structures for storage of water Assist in organising storage space
			<i>Gr 4 : 2nd year</i> <ul style="list-style-type: none"> Identify and name common types of weeds in garden on hand of poster Identify which insect have which effect(harmful or eco-friendly) Learners actively partake in processes of harvesting Learners practise to prune hedge while teacher give advice Learners assist in selecting suitable feed for specific animals Learners describe which products come from which animals Learners explain the water cycle Assist in practical application of activities regarding storage
10	Assessment	The week allocated to formal assessment should be integrated across the nine (9) weeks planned for teaching and learning. The assessment will consist of practical tasks with 80% weighting and informal theoretical assessment with 20% weighting. <u>Sustain all agricultural practices needing continuous maintenance</u>	

Assessment

Assessment is formally recorded during four (4) practical sessions with a minimum of four (4) skills reported. Learners, regardless of abilities, shall be assessed on the same skill. The following serves as suggestion of skills to record and report on

Observe *Gr 4 : 1st year*

Gr 4 : 2nd year

Week 2 Label different insects using a chart

Identify which insect have which effect(harmful or eco-friendly)

Week 3 Use sensory cues to indicate maturity of fruit

Active participation in processes of harvesting

Week 4 Assist to prune hedge

Prune hedge while teacher give advice

Week 5 Describe different types of feed with examples

Assist in selecting suitable feed for specific animals

Week 6 Describe which animal products come from which animals

Describe which products come from which animals

Week 7 Identify sources of natural/manmade structures for storage of water

Explain the water cycle

Week 8 Assist in organising storage space

Assist in organising storage space

Four theoretical activities are assessed and recorded, however, a minimum of 1 theoretical activity is reported on. The following serves as suggestions of theoretical activities to report on.

Week 1 Match and glue weeds next to drawing on worksheet

Name common types of weeds in garden

Week 2 Identify and name circle eco-friendly insects

Categorise harmful or eco-friendly insects

3.2.5 Grade 5 Term 1

Learners spend three (3) years in Grade 5 , and therefore different suggested activities are provided during their second year in Grade 5 and the third year in Grade 5 . It is not advisable to repeat the same activities more than once over the three years as this will not provide the learner the opportunity to learn additional skills.

Grade 5 Term 1			
WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
1	General Farming	<p><u>Apply basic and general safety practices</u></p> <ol style="list-style-type: none"> 1. Apply personal hygiene 2. Understand what basic food safety practices are 3. Identify and apply the safety measure regarding the use of basic agricultural tools and equipment 4. Understand the basic hygienic requirements of organic food 5. Understand the importance of protective clothing <p><u>Apply safe and secure practices in the agricultural community</u></p> <ol style="list-style-type: none"> 1. Identify potential safety and security hazards in the immediate environment, community or on a farm 2. Understand the issues around community policing 	<p>Gr 5 : 1st year</p> <ul style="list-style-type: none"> • Teacher explains reasons for personal hygiene • Use chart with hand wash techniques – learners practically all wash hands, copying demonstration and example of teacher • Discuss, name and demonstrate the safe handling of basic hand agricultural tools and equipment and the dangers associated with its use • Learners practice through getting small tasks to do – weed general garden using handheld tools. After use they must be able to properly clean and store tools, explain with use of pictures/drawings to indicate space of tools in storage – learners assist in placing tools in place • Observe and discuss different spoilt food products on hand of examples, i.e., mould, yeast, changes of food colour, texture, flavour and/or smell. Allow Learners practically to use their senses – touch, feel, smell and taste where possible. • Discuss reasons for cleaning equipment. As an experiment use dirty equipment on food products, leave for a day or two for learners to

Grade 5 Term 1

WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>3. Understand the issues around neighbourhood watch</p> <p>4. Understand safety practices regarding fertilizer and cleaning materials</p> <p>5. Display skills in organising a group around safety and security issues</p> <p><u>Operate in a team in an agricultural environment</u></p> <p>1. Identify the structure and purpose of a team in an agricultural environment</p> <p>2. Identify team dynamics within the workplace</p> <p>3. Understand the roles and responsibilities required to work in a team</p> <p>4. Apply the roles and responsibilities required to work in a team</p> <p>5. Apply communication skills within an agricultural environment</p> <p>6. Review the effectiveness of a team</p> <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p>observe the change in product</p> <ul style="list-style-type: none"> Identify and name protective clothing (boots, overalls, etc), Practice to dress and fit protective clothing correctly, continue with activities needed for next activity. Pack away clothing in correct way (folded or hanged) in space in storeroom Walk around school/work area, learners are encouraged to point out and discuss potential safety and security hazards Explain about community policing using a clip from internet, allow learners to discuss and question incidents Point out safety practices regarding the use/storage of fertilizers and cleaning materials Explain the advantages and necessity of working in a team Use one or two teambuilding exercises to demonstrate to learners the effectiveness of teams Define the different roles of people in a team as well as the higher responsibility of the team leaders Practical exercises in the garden to put teamwork to practice in the garden <p>*Teacher's tip: Learners start a garden file/book for keeping records and worksheets, decorate and cover with leaf prints as a creative activity pointing out different shapes of leaves</p>

Grade 5 Term 1

WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p><i>Gr 5 : 2nd year</i></p> <ul style="list-style-type: none"> • Teacher explains reasons for personal hygiene • Use chart with hand wash techniques – learners practically all wash hands, copying demonstration and example of teacher • Discuss, name and demonstrate the safe handling of basic hand agricultural tools and equipment and the dangers associated with its use. • Learners practice through getting small tasks to do – weed general garden using handheld tools. • After use they must be able to properly clean and store tools, explain with use of pictures/drawings to indicate space of tools in storage – learners assist in placing tools in place • Observe and discuss different spoilt food products on hand of examples, i.e., mould, yeast, changes of food colour, texture, flavour and/or smell. Allow Learners practically to use their senses – touch, feel, smell and taste where possible. • Discuss reasons for cleaning equipment. As an experiment use dirty equipment on food products, leave for a day or two for learners to observe the change in product • Identify and name protective clothing (boots, overalls, etc), Practice to dress and fit protective clothing correctly, continue with activities needed for next activity. Pack away clothing in correct way (folded or hanged) in space in storeroom

Grade 5 Term 1

WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> • Walk around school/work area, learners are encouraged to point out and discuss potential safety and security hazards and what they would do to improve dangerous areas • Explain about community policing using a clip from internet, allow learners to discuss and question incidents • Point out safety practices regarding the use/storage of fertilizers and cleaning materials <hr/> <ul style="list-style-type: none"> • Explain the advantages and necessity of working in a team • Introduce one or two new teambuilding exercises to demonstrate to learners the effectiveness of teams • Define the different roles of people in a team as well as the higher responsibility of the team leaders • Practical exercises in the garden to put teamwork to practice in the garden <p><i>Gr 5: 3rd year</i></p> <ul style="list-style-type: none"> • Teacher explains reasons for personal hygiene • Use chart with hand wash techniques – learners practically all wash hands, copying demonstration and example of teacher • Discuss, name and demonstrate the safe handling of basic hand agricultural tools and equipment and the dangers associated with its use.

Grade 5 Term 1

WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> • Learners practice through getting small tasks to do – weed general garden using handheld tools. • After use they must be able to properly clean and store tools, explain with use of pictures/drawings to indicate space of tools in storage – learners assist in placing tools in place • Observe and discuss different spoilt food products on hand of examples, i.e., mould, yeast, changes of food colour, texture, flavour and/or smell. Allow Learners practically to use their senses – touch, feel, smell and taste where possible. • Discuss reasons for cleaning equipment. As an experiment use dirty equipment on food products, leave for a day or two for learners to observe the change in product • Identify and name protective clothing (boots, overalls, etc), Practice to dress and fit protective clothing correctly, continue with activities needed for next activity. Pack away clothing in correct way (folded or hanged) in space in storeroom • Walk around school/work area, learners are encouraged to point out and discuss potential safety and security hazards and what they would do to improve dangerous areas • Explain about community policing using a clip from internet, allow learners to discuss and question incidents • Point out safety practices regarding the use/storage of cleaning

Grade 5 Term 1

WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p>materials</p> <ul style="list-style-type: none"> Learners discuss the advantages and necessity of working in a team Repeat previous teambuilding exercises to strengthen the effectiveness of teams Define the different roles of people in a team as well as the higher responsibility of the team leaders Practical exercises in the garden to put teamwork to practice in the garden
2	General Farming	<p><u>Select, use and care for hand tools and basic equipment for agricultural tasks</u></p> <ol style="list-style-type: none"> Select the appropriate tool for use in a specific task Apply safety measures regarding the use of basic agricultural tools and equipment Demonstrate how to care for and maintain tools and equipment Describe correct methods to store tools and equipment correctly and safely <p><u>Prepare, erect and maintain wire fencing for</u></p>	<p><i>Gr 5 : 1st year</i></p> <ul style="list-style-type: none"> Demonstrate how to use basic hand tools and the dangers associate with its use Learners practically use hand tool and equipment whilst preparing first vegetable patch Demonstrate how to care and maintain hand tools Learners replace equipment in places (pictures/words for indicating space of tools in storage) correctly and safely <p>*Teacher's tip: Teacher assists learners to identify 2m X 1m plot per four learners to fulfil their practical skills – learners identify on a simple map (worksheet) which plot is theirs through colouring it in with green and place it in file</p> <ul style="list-style-type: none"> Discuss reasons for fencing

Grade 5 Term 1

WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<u>different farming practices</u> 1. Identify areas that need fencing and describe kinds of fencing to implemented 2. Identify and map area to be fenced 3. Prepare equipment and material to be used 4. Preparation of area to be fenced 5. Erection of fences and gates 6. Identify problems associated or experienced during erecting of fencing <u>Sustain all agricultural practices needing continuous maintenance</u>	<ul style="list-style-type: none"> • Show examples of animal predators (note what they do – climb, burrow, fly, scratch) and discuss what damage they can cause • Visit areas with different kinds of fencing • Teacher and learners check whether existing fencing is in order and learners assist in doing the necessary maintenance as required • Practical activities maintaining fencing in different areas • Select correct equipment to be used in preparation to do maintenance work on fencing <p><i>Gr 5 : 2nd year</i></p> <ul style="list-style-type: none"> • Learners demonstrate to each other how to use basic hand tools and the dangers associate with its use while teacher guide them • Learners practically use hand tool and equipment whilst preparing first vegetable patch • Learners demonstrate to each other on how to care and maintain hand tools • Learners replace equipment in places (pictures/words for indicating space of tools in storage) correctly and safely <p>*Teacher's tip: Teacher assists learners to identify 2m X 1m plot per four learners to fulfil their practical skills</p> <ul style="list-style-type: none"> • Learners explain reasons for fencing to the teacher • Visit areas with different kinds of fencing where learners explain to

Grade 5 Term 1

WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p>each other what the reason is for different kinds of fencing</p> <ul style="list-style-type: none"> • Teacher and learners check whether existing fencing is in order and learners assist in doing the necessary maintenance as required • Practical activities maintaining fencing in different areas • Select correct equipment to be used in preparation to do maintenance work on fencing • Identify an area to be fenced and explain why good fencing is required (especially if livestock is to be kept) and what kind of fencing is appropriate to use • Learners from year 3 demonstrate on what preparation to be done and the process (equipment needed – koevoet and spades to make holes to plant the poles; pliers, wire puller, measuring tape, etc. For actual fencing)
			<p><i>Gr 5: 3rd year</i></p> <ul style="list-style-type: none"> • Demonstrate how to use basic hand tools and the dangers associate with its use while teacher supervise • Use hand tool and equipment whilst preparing first vegetable patch • Care for and maintain hand tools while teacher supervise • Replace equipment in places (pictures/words for indicating space of tools in storage) correctly and safely • Explain reasons for fencing • Teacher and learners check whether existing fencing is in order,

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			<p>teacher supervise while learners do the necessary maintenance as required</p> <ul style="list-style-type: none"> • Select correct equipment to be used in preparation for fencing • Identify an area to be fenced and explain why good fencing is required (especially if livestock is to be kept) and what kind of fencing is appropriate to use • Prepare holes to plant poles and complete the process of fencing (equipment needed – koevoet and spades to make holes to plant the poles; pliers, wire puller, measuring tape, etc. for actual fencing) – teacher advise and assist where needed.
3	Plant Production	<p><u>Apply basic food safety practices</u></p> <ol style="list-style-type: none"> 1. Apply personal hygiene 2. Describe what basic food safety practices are 3. Understand why it is important to remove waste from garden according to workplace procedures 4. Understand the basic requirements of organic food <p><u>Identify, describe and understand different crops and/or fruit cultivars</u></p> <ol style="list-style-type: none"> 1. Demonstrate an understanding of different crops/fruit cultivars in region 	<p><i>Gr 5: 1st year</i></p> <ul style="list-style-type: none"> • Demonstrate how to properly wash hands and equipment before and after working with plant products • Discuss the basic requirement of organic food, i.e. no pesticides/fertilizers and the safety requirements to adhere to • Explain importance of removing waste (weeds, pruning and infected garden waste) from garden • Visit community gardens to identify important crops (fruit and vegetables) of the region – also encourage learners to identify crops from their own gardens) • Make a group poster with illustrations of crops • Find pictures in magazines to match illustrations of crops on poster

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WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>2. Identify various examples of crops according to physical and handling characteristics</p> <p>3. Demonstrate an understanding of climatic requirements for growing crops suitable for region</p> <p>4. Identify appropriate soil preparation methods for the planting of different crops/fruit</p> <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p><i>Gr 5 : 2nd year</i></p> <ul style="list-style-type: none"> • Learners show each other how to properly wash hands and equipment before and after working with plant products • Discuss the basic requirement of organic food, i.e. no pesticides/fertilizers and the safety requirements to adhere to (websites: organicgardening.about.com or soilassociation.org) • Explain importance of removing waste (weeds, pruning and infected garden waste) from garden • Visit community gardens or farm to identify important crops of the region • Label a poster with illustrations of crops • Find pictures in magazines to match illustrations of crops/fruit on poster with which learners make individual posters • Demonstrate soil preparation methods for the planting of different crops/fruit <p><i>Gr 5 : 3^d year</i></p> <ul style="list-style-type: none"> • Learners from year three demonstrate to other learners how to properly wash hands and equipment before and after working with plant products • Discuss the basic requirement of organic food, i.e. no pesticides/fertilizers and the safety requirements to adhere to (websites: organicgardening.about.com or soilassociation.org).

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WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> • Use the information obtained from websites to make group poster s using illustrations from magazines or drawings • Explain importance of removing waste (weeds, pruning and infected garden waste) from garden • Visit community gardens or a farm to identify important crops of the region • Label a poster with illustrations of crops • Find pictures in magazines to match illustrations of crops/fruit on poster with which learners make individual posters • Demonstrate soil preparation methods for the planting of different crops/fruit and discuss appropriate spaces to plant different crops/fruit
4	Gardening/Horticulture	<u>Health and safety in the gardening/horticulture industry</u> <ol style="list-style-type: none"> 1. Explain the importance and benefits of protective clothing 2. Explain how to use equipment and tools safely 3. Explain the reason for good housekeeping 4. Explain what the possible hazards are in the horticulture industry 5. Describe and demonstrate the actions that will be taken in an emergency situation 	<p><i>Gr 5 : 1st year</i></p> <ul style="list-style-type: none"> • Demonstrate with available clothes and equipment • Explain that different protective clothing is for specific tasks • Make use of chart with visual resources to discuss actions • Explain the benefits of protective gear either using examples from the past, clips from internet or videos • Learners use clothes and equipment available whilst assisting in tasks (i.e. weeding, sweeping driveways) • Invite a business to demonstrate different types of lawn mowers and equipment to show the learners the various models and their functions

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WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>6. Demonstrate basic first aid practices in an emergency situation</p> <p><u>Mow lawns and cut trees in landscape areas</u></p> <ol style="list-style-type: none"> 1. Apply the correct methods where mowing/weed eating or cutting trees is needed 2. Identify the different types of weed eaters, lawn mowers, chainsaws and how to use them 3. Explain the preparations necessary for mowing and cutting small trees – both with regards to protective clothing and safe area to be mowed or when trees area to be cut <p><u>Sustaining all agricultural practices needing continuous maintenance</u></p>	<ul style="list-style-type: none"> • Explain preparation needed for mowing a lawn in an area, i.e. removal of stones/weeds • Practical demonstration with lawn mower while learners observe • While learners are taking turns in using lawnmower under strict supervision other learners can rake and collect grass not caught by lawnmower • Practical demonstration of caring and storage of lawn mower while learners assist <hr/> <p><i>Gr 5: 2nd year</i></p> <ul style="list-style-type: none"> • Learners demonstrate with available clothes and equipment • Explain that different protective clothing is for specific tasks • Explain how to prevent accidents • Demonstration on how to apply first aid in case of work-related accident <ul style="list-style-type: none"> • Invite a business to demonstrate different types of lawn mowers and equipment to show the learners the various models and their functions • Discuss available equipment at school • Learners explain to each other what preparation is needed for mowing a lawn in an area, i.e. removal of stones/weeds and participate in the activity • Practical demonstration with lawn mower while learners observe • While learners are taking turns in using lawnmower under strict

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WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p>supervision other learners can rake and collect grass not caught by lawnmower</p> <ul style="list-style-type: none"> • Learners demonstrate to each other on caring of and storage of lawnmower • Practical demonstration with chainsaw while learners observe and assist • Practical demonstration of caring and storage of all equipment used while learners assist <hr/> <p><i>Gr 5: 3^d year</i></p> <ul style="list-style-type: none"> • Learners demonstrate and explain to each other with available clothes and equipment • Learners individually explain to the group that different protective clothing is for specific tasks • Learners explain how to prevent accidents • Demonstrate how to apply first aid in case of work-related accident where after learners practice on each other <ul style="list-style-type: none"> • Discuss available lawn mowing equipment at school • Learners assess what preparation is needed for mowing a lawn in an area, i.e. removal of stones/weeds and participate in the activity • Learners take turns in using the lawnmower under supervision – other learners rake and collect grass not caught by lawnmower • Practical demonstration with chainsaw where after learners individually

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WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p>work with chainsaw under strict supervision and with assistance from the teacher</p> <p>Learners take care of cleaning and storage of all equipment used</p>
5	Animal Production	<p><u>Identify and observe the different breeds of farm animals</u></p> <ol style="list-style-type: none"> 1. Identify the different breeds of farm animals in your area 2. Discuss the visual differences and physical attributes in farm animal species and describe it using own words 3. Explain the functional purpose of the different farm animal species 4. Observe animal behaviour <p><u>Care for farm animals</u></p> <ol style="list-style-type: none"> 1. Identify equipment required to carry out basic veterinary practices 2. Apply basic veterinary practices in treatment of cuts, wounds and abscesses 3. Identify equipment needed for dipping and deworming 4. Identify how and when to deworm to prevent tick 	<p><i>Gr 5 : 1st year</i></p> <ul style="list-style-type: none"> • Use a clip from the internet or dvd, to observe selection of small breeds of farm animals • Explain the visual differences in small farm animal breeds • Use a poster or books to identify and describe animals using own words • Learners practically interact with smaller farm animals while feeding animals by hand where possible • Label small breeds of farm animals on a worksheet • Identify equipment needed for the different procedures; spray, needles, syringes, drenches, dip, etc. • Complete worksheet linking same equipment to each other • Demonstrate the different ways to treat, inject, deworm or dip animals • Walk amongst animals to identify signs of mating and birthing • Explain and demonstrate what to do when birthing problems occur <p><i>Gr 5 : 2nd year</i></p> <ul style="list-style-type: none"> • Use a clip from the internet or dvd, to observe selection of small breeds of farm animals • Explain the visual differences in small farm animal breeds

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WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>and worm infestation</p> <p>5. Dip and deworm farm animals</p> <p>6. Identify, record and report mating in animals</p> <p>7. Identify the basic signs of a birthing process</p> <p>8. Identify birthing problems</p> <p>9. Administer post-natal care to farm animals</p> <p>10. Identify equipment needed for and administer hoof care</p> <p>11. Assist in administering hoof care</p> <p>12. Observe and identify equipment needed for hoof care</p> <p><u>Sustaining all agricultural practices needing continuous maintenance</u></p>	<ul style="list-style-type: none"> • Use a poster or books to identify and describe animals using own words • Learners practically interact with smaller farm animals while feeding animals by hand where possible • Label small breeds of farm animals on a worksheet • Identify equipment needed for the different procedures; spray, needles, syringes, drenches, dip, etc. • Match names of equipment to pictures of equipment on a worksheet • Learners assist while teacher demonstrates the different ways to treat, inject, deworm or dip animals • Walk amongst animals to identify signs of mating and birthing • Explain and demonstrate what to do when birthing occur <p><i>Gr 5 : 3rd year</i></p> <ul style="list-style-type: none"> • Use a clip from the internet or dvd, to observe selection of small breeds of farm animals • Use a poster or books to identify and describe animals using own words • Learners practically interact with smaller farm animals while feeding animals by hand where possible • Label small breeds of farm animals on a worksheet • Identify equipment needed for the different procedures; spray, needles,

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WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p>syringes, drenches, dip, etc. and assist in cleaning equipment</p> <ul style="list-style-type: none"> • Copy names of equipment to appropriate pictures • Learners assist while teacher demonstrates the different ways to treat, inject, deworm or dip animals • Walk amongst animals to identify signs of mating and birthing • Explain and demonstrate what to do when birthing and/or problems occur • Demonstrate hoof care while learners assist
6	Environmental Practices	<p><u>Healthy Living: food from the veld</u></p> <ol style="list-style-type: none"> 1. Understand indigenous knowledge re food from the veld 2. Identify different wild and leafy vegetables 3. Explain the dangers of eating plants that are not identified correctly <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p><i>Gr 5: 1st year</i></p> <ul style="list-style-type: none"> • Invite an expertise from a museum/herbarium/community to speak to learners on food from the veld in the surrounding areas • Encourage learners to look for plants discussed at their homes or in the vicinity – bring plants to school • Explain the dangers of eating plants using a chart or pictures of the different foods from the veld that are poisonous <p><i>Gr 5: 2nd year</i></p> <ul style="list-style-type: none"> • Invite an expertise from a museum/herbarium/community to speak to learners on food from the veld in the surrounding areas • Encourage learners to look for plants discussed at their homes or in the vicinity – bring plants to school to propagate (i.e. spekboom/portulacaria afra/iGwanitsha is a good example to use) • Explain the dangers of eating plants using a chart or pictures of the different foods from the veld that are poisonous

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WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p><i>Gr 5 : 3rd year</i></p> <ul style="list-style-type: none"> • Invite an expertise from a museum/herbarium/community to speak to learners on food from the veld in the surrounding areas • Encourage learners to look for plants discussed at their homes or in the vicinity – bring plants to school to propagate (i.e. spekboom/portulacaria afra/iGwanitsha is a good example to use) • Learners explain the dangers of eating plants to each other with the guidance of the teacher, using a chart or pictures of the different foods from the veld that are poisonous
7	Business Practices	<p><u>Apply basic skills in storage management and stocktaking</u></p> <ol style="list-style-type: none"> 1. Observe the importance of a tidy storage space 2. Prepare storage space to receive stock through cleaning and disinfecting 3. Identify appropriate space for storage of different products and equipment 4. Understand the prevention of contamination 5. Apply basic stock inventory taking, issuing and receiving of stock 6. Identify the appropriate re-order level and reporting on stock levels for prompt re-ordering 	<p><i>Gr 5 : 1st year</i></p> <ul style="list-style-type: none"> • Explain and demonstrate how storage space should be organised to ensure easy access to what is needed for specific activities • Assist in organising and tidying storage space • Explain reason and show learners why space is allocated for equipment • Demonstrate and explain why and how to clean/disinfect areas of storage • Explain when is the appropriate time to report about re-ordering • Complete a worksheet through ticking next to pictures quantity of stock <p><i>Gr 5 : 2nd year</i></p> <ul style="list-style-type: none"> • Explain and demonstrate how storage space should be organised to ensure easy access to what is needed for specific activities while learners assist

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WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<u>Sustain all agricultural practices needing continuous maintenance</u>	<ul style="list-style-type: none"> Learners assist in cleaning/disinfecting areas of storage and explain in their own way why it is important Identify the appropriate re-order level and reporting on stock levels for prompt re-ordering Explain the use of simple forms/lists (with pictures) to complete inventory of storage area Learners take stock on own list on worksheet and compare lists to check if the stock taking was done correctly
			<p><i>Gr 5 : 3rd year</i></p> <ul style="list-style-type: none"> Learners explain and demonstrate to younger learners how storage space should be organised to ensure easy access to what is needed for specific activities while teacher guide them in the process Clean and disinfect areas of storage and explain in their own way why it is important Identify the appropriate re-order level and reporting on stock levels for prompt re-ordering Explain the use of simple forms/lists to complete inventory of storage area Learners take stock on own list and compare lists with teacher to practice and check if the stock taking was done correctly
8	Business Practices	<u>Understand basic costing (income/expenditure)</u> 1. Understand a cash flow budget	<p><i>Gr 5 : 1st year</i></p> <ul style="list-style-type: none"> Discuss the value of keeping regular track of income and expenditure Explain to learners how to keep track of income and expenditure using

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WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>2. Understand the different cost aspects to be found in agriculture</p> <p>3. Understand or assist in drawing up a simple income and expenditure balance sheet</p> <p><u>Understand entrepreneurship in agriculture</u></p> <p>1. Identify opportunities, outlets and basic requirements of local markets</p> <p>2. Understand the differences in quality of products and be aware of local preferences</p> <p>3. Compare prices of various outlet to price a products</p> <p>4. Understand the importance of packaging and display of products</p> <p>5. Set up and man a stall at an outlet in the immediate community</p> <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p>a simple book-keeping system</p> <ul style="list-style-type: none"> • Discuss different kinds of outlets for products; street vendor, cafe, supermarket, fruit and vegetable market, etc • After harvesting of produce, learners make lists of all products on a simple format provided by the teacher • Discuss and compare quality of products - discuss what to do with produce not appropriate for selling (donations to charity organisations, composting, priced lower, etc) • Learners demonstrate their skills in packaging and display of products, getting produce ready for selling to staff members <p><i>Gr 5 : 2nd year</i></p> <ul style="list-style-type: none"> • Discuss the importance of keeping track of income and expenditure with the guidance of the teacher through questions and answers • Practise to make entries of income and expenditure on a simple spreadsheet to understand the difference between income and expenditure • Discuss different kinds of outlets for products; street vendor, cafe, supermarket, fruit and vegetable market, etc • After harvesting of produce, learners make lists of all products on a simple format drawn up by themselves • Discuss and compare quality of products - discuss what to do with

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WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p>produce not appropriate for selling (donations to charity organisations, composting, priced lower, etc)</p> <ul style="list-style-type: none"> Learners demonstrate their skills in packaging and display of products, getting produce ready for selling to staff members and parents
			<p><i>Gr 5: 3^d year</i></p> <ul style="list-style-type: none"> Explain how to keep track of income and expenditure on a simple spreadsheet with the guidance of the teacher through questions and answers Learners take turns and assist each other in making entries of income and expenditure to Discuss different kinds of outlets for products; street vendor, cafe, supermarket, fruit and vegetable market, etc After harvesting of produce, learners make lists of all products on a simple format drawn up by themselves Discuss and compare quality of products - discuss what to do with produce not appropriate for selling (donations to charity organisations, composting, priced lower, etc) Learners demonstrate in practical activities their skills in packaging and display of products, getting produce ready for selling to staff members, parents and community
9		<u>Revise and sustain activities taught in previous weeks and agricultural practices needing continuous</u>	<p><i>Gr 5: 1st year</i></p> <ul style="list-style-type: none"> Point out safety practices regarding cleaning materials

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WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<u>maintenance</u> 1. Understand safety practices regarding fertilizer and cleaning material 2. Know how to erect fences and gates 3. Identify appropriate soil preparation methods for planting of different crops/fruit 4. Apply correct methods for mowing lawn and care for lawn mowers and chainsaws 5. Identify equipment required to carry out basic veterinary practices 6. Identify different wild and leafy vegetables 7. Apply basic stock inventory taking 8. List different kinds of outlets for produce	<ul style="list-style-type: none"> Identify animal predators and discuss what damage they can cause Discuss appropriate space to plant crops/fruit Rake and collect grass not caught by lawn mower Sort various equipment needed for veterinary practices Collect wild leafy vegetables from home or school garden and name them Complete worksheet through ticking next to picture quantity of stock Name pictures of different outlets available
			<i>Gr 5 : 2nd year</i> <ul style="list-style-type: none"> Point out safety practices regarding fertilizer Explain reasons for fencing Prepare soil for planting of different crops/fruit Appropriate use, care and storage of lawn mower Name various equipment needed for veterinary practices Propagate wild leafy plants like spekboom Take stock on list on worksheet (either with picture or words depending on the ability of learners) Match names to pictures of different outlets available
			<i>Gr 5 : 3rd year</i> <ul style="list-style-type: none"> Point out safety practices regarding storage of cleaning materials and fertilizers Maintain existing fencing

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WEE	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> • Prepare soil for planting of different crops/fruit • Appropriate care and storage of weed eater and chainsaw • Assist in cleaning equipment needed for veterinary practices • Explain the dangers of eating wild plants that are unknown • Take stock on list and compare with teacher's list • Copy names to pictures of different outlets available
10	Assessment	<p>The week allocated to formal assessment should be integrated across the nine (9) weeks planned for teaching and learning. The assessment will consist of practical tasks with 80% weighting and informal theoretical assessment with 20% weighting.</p> <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	

Assessment

Assessment is formally recorded during four (4) practical sessions with a minimum of four (4) skills reported. Learners, regardless of abilities, shall be assessed on the same skill. The following serves as suggestion of skills to record and report on

	<i>Gr 5 : 1st year</i>	<i>Gr 5 : 2nd year</i>	<i>Gr 5 : 3rd year</i>
Week 2	List safety practices regarding cleaning materials	Discuss safety practices regarding fertilizer	Discuss safety practices: cleaning materials/fertilizers
Week 3	Discuss what damage predators can cause	List reasons for fencing	Maintain existing fencing
Week 4	Rake/collect grass not caught by lawn mower	List appropriate use/care/storage of lawn mover	Discuss care and storage of weed eater/chainsaw
Week 5	Sort equipment needed: veterinary practices	Name equipment needed: veterinary practices	Clean equipment needed for veterinary practices
Week 6	Name wild/leafy vegetables from home/school	Propagate wild leafy/plants like spekboom	Discuss dangers of eating wild plants that are unknown
Week 7	Tick next to picture the quantity of stock	Take stock on list on worksheet	Take stock and compare with teacher's list
Week 8	Name different outlets available	Match names to different outlets available	Copy names to different outlets available

Four theoretical activities are assessed and recorded, however, a minimum of 1 theoretical activity is reported on. The following serves as suggestions of theoretical activities to report on.

Week 3	Match veterinary equipment on worksheet	Match picture/names of veterinary equipment	Copy names of veterinary equipment to pictures
Week 7	Practise to take stock by ticking next to picture	Take stock on list of names/pictures on worksheet	Take stock

3.2.6 Grade 5 Term 2

Grade 5 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
1	General Farming	<p><u>Apply basic and general safety practices</u></p> <ol style="list-style-type: none"> 1. Apply personal hygiene 2. Understand what basic food safety practices are 3. Identify and apply the safety measure regarding the use of basic agricultural tools and equipment 4. Understand the basic hygienic requirements of organic food 5. Understand the importance of protective clothing <p><u>Demonstrate an understanding of and/or explain the properties of soil</u></p> <ol style="list-style-type: none"> 1. Define soil structure and properties 2. Understand the qualities and uses of different soil types 3. Recognise the difference between topsoil and subsoil 4. Name life in the soil study to establish the health of soil 	<p>Gr 5 : 1st year</p> <p>Discuss:</p> <ul style="list-style-type: none"> • Reasons for personal hygiene • Basic food safety practices and hand wash techniques • Safety measures regarding the use of basic agricultural tools and equipment • Hygienic requirement when dealing with organic food • Importance of protective clothing • Learners label different soil types • Practical explanations and discussion; learners dig hole to observe different layers of soil in preparation for trench composting • Poster of different layers of soil types • Learners observe living creatures in soil from an area where soil was neglected to identify the different species with a magnifying glass and compare it with compost rich soil • Practical explanation and demonstration of process of composting • Practical participation by learners in completing the processes • Visit sites where different ways of composting is practiced or watch a video clip • Practical explanation while learners observe

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WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<u>Demonstrate an understanding of soil preparation and composting and the benefits of adding organic enrichment to the soil</u> 1. Identify the reason for soil sampling and fertilizing of crops 2. Demonstrate an understanding of soil preparation 3. Explain what stockpiling of topsoil is and why it is important 4. Explain why we till and dig before planting 5. Use hand held tools and low-technology implements for the effective preparation of soil 6. Understand the reason for mulching and composting using different methods 7. Understand the process of making of compost 8. Understand nutritional needs and deficiencies in plants 9. Apply natural or chemical fertilizer and/or nutrient substances under close supervision <u>Sustain all agricultural practices needing continuous maintenance</u>	<ul style="list-style-type: none"> • Make a sample of each way of composting while learners assist • Learners gather available materials and assist in making compost heaps • Learners make or assist and use hand tool in making compost heaps depending on space available <i>Gr 5 : 2nd year</i> Discuss: <ul style="list-style-type: none"> • Reasons for personal hygiene • Basic food safety practices and hand wash techniques • Safety measures regarding the use of basic agricultural tools and equipment • Hygienic requirement when dealing with organic food • Importance of protective clothing <ul style="list-style-type: none"> • Learners explain different ways of composting with the guidance of the teachers • Practical explanations and discussions with the guidance of the teacher; learners dig hole to observe different layers of soil in preparation for trench composting • Learners form groups of four and each group make a poster of different layers of soil types, label it and explain the difference to each other • Learners observe living creatures in soil from an area where soil was neglected to identify the different species with a magnifying glass and

Grade 5 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p>compare it with compost rich soil</p> <ul style="list-style-type: none"> • Practical explanation and demonstration of process of composting • Practical participation by learners in completing the processes • Visit sites where different ways of composting is practiced • Practical explanation while learners observe • Divide learners in groups of four, each group make a sample of each way of composting while • Learners gather available materials and assist in making compost heaps • Learners use hand tools in making compost heaps in groups depending on space available <p><i>Gr 5: 3rd year</i></p> <p>Discuss:</p> <ul style="list-style-type: none"> • Reasons for personal hygiene • Basic food safety practices and hand wash techniques • Safety measures regarding the use of basic agricultural tools and equipment • Hygienic requirement when dealing with organic food • Importance of protective clothing <ul style="list-style-type: none"> • Learners explain different ways of composting to each other in small groups

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WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> Learners dig hole to observe different layers of soil in preparation for trench composting and explain the difference layers to each other as the process progress Learners use poster made previous year and explain the difference to each other in their own words Learners observe living creatures in soil from an area where soil was neglected to identify the different species with a magnifying glass and compare it with compost rich soil, use a simple chart to identify the different species Practical participation and explanations by learners in completing the processes of composting Visit sites where different ways of composting is practiced Practical explanation while learners observe Divide learners in groups of four, each group make a sample of each way of composting while Learners gather available materials and assist in making compost heaps Learners use hand tools in making compost heaps in groups depending on space available
2	General Farming	<u>Natural and chemical fertilization of soil</u>	<p><i>Gr 5 : 1st year</i></p> <ul style="list-style-type: none"> Revisit experimental vegetable plots and explain processes to learners: one plot treated with fertilizer and one only watered no fertilizer

Grade 5 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		1. Identify the reason for soil sampling 2. Understand nutritional needs and deficiencies in plants 3. Identify factors (e.g. soil properties) that influence fertilizing for crop health 4. Identify the reason for fertilizing crops 5. Understand the process of making and mineralisation of natural fertilizers using plant material 6. Explain the need of a worm farm as natural fertilizer 7. Understand the process of using chemical fertilizers 8. Apply fertilizers to a crop 9. Identify the reason for soil sampling, nutritional needs and deficiencies in plants that influence the need of fertilizing for efficient crop growth <u>Sustain all agricultural practices needing continuous maintenance</u>	<ul style="list-style-type: none"> Practical sessions of making different kinds of natural fertilizers and applying it to appropriate plants identified and explained by teachers Explain the use of the fluid from worm farm as a natural fertilizer Repack the worm farm Learners set up a simple worm farm using 5litre ice-cream tubs
			<i>Gr 5 : 2nd year</i> <ul style="list-style-type: none"> Practical sessions of making different kinds of natural fertilizers and applying it to appropriate plants identified and explained by teachers Explain the use of the fluid from worm farm as a natural fertilizer Repack the worm farm Learners set up a simple worm farm using 5litre ice-cream tubs Visit a commercial farm where application of fertilization is done on a regular basis Explain the needs, benefits and dangers of fertilization Apply chemical fertilizer and nutrient substances under strict supervision
			<i>Gr 5 : 3^d year</i> <ul style="list-style-type: none"> Learners make different kinds of natural fertilizers and applying it to appropriate plants identified and explained by teachers Explain the use of the fluid from worm farm as a natural fertilizer Repack the worm farm Learners set up a simple worm farm using 5litre ice-cream tubs Visit a commercial farm where application of fertilization is done on a

Grade 5 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p>regular basis</p> <ul style="list-style-type: none"> • Explain the needs, benefits and dangers of fertilization • Apply chemical fertilizer and nutrient substances under strict supervision
3	Plant Production	<p><u>Propagate plants from seeds, cuttings and grafting and planting into open ground</u></p> <ol style="list-style-type: none"> 1. Use tools correctly for every specific crop 2. Use equipment correctly in order to space plants according to the requirements of specific plants <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p><i>Gr 5 : 1st year</i></p> <ul style="list-style-type: none"> • Prepare for seed growing explaining the use of seedling containers, growth media, plant labels • Demonstrate the procedure for growing seeds • Explain the procedure and use of correct equipment when transplanting seedlings
			<p><i>Gr 5 : 2nd year</i></p> <ul style="list-style-type: none"> • Learners prepare for seed growing explaining the use of seedling containers, growth media, plant labels to each other with teachers observing and helping learners to explain process • Demonstrate the procedure for growing seeds while learners assist • Learners partake in the procedure of and use of correct equipment transplanting seedlings • Invite a horticulturist to demonstrate to learners the process of preparing cuttings for new plants
			<p><i>Gr 5 : 3^d year</i></p> <ul style="list-style-type: none"> • Learners prepare for seed growing explaining the use of seedling containers, growth media, plant labels to each other with teacher observing and helping learners to explain process • Demonstrate the procedure for growing seeds where after learners

Grade 5 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p>complete the process on their own</p> <ul style="list-style-type: none"> Learners partake in the procedure of and use of correct equipment transplanting seedlings Demonstrate to learners the process of preparing cuttings for new plants, give learners the opportunity to prepare cuttings on their own Invite a horticulturist to demonstrate to learners the process of grafting fruit trees
4	Gardening/ Horticulture	<ol style="list-style-type: none"> <u>Propagate plants from seeds and planting in open ground</u> Prepare for various methods of seed sowing Sow seeds manually Apply the correct method of watering and maintain the ideal environment for germination to take place Select plants from stock pile or nursery and prepare for planting Identify the best time of the day for transplanting Arrange plants in area where they are to be planted Follow correct procedure of planting, backfilling and watering 	<p><i>Gr 5: 1st year</i></p> <ul style="list-style-type: none"> Draw up a chart of which plants can be planted during certain periods of the year for the specific area Discuss the various seeds available on the market Explain and demonstrate to learners how to harvest seeds from plants Demonstrate to learners how to prepare a plot for sowing seeds directly Plant ornamental seedlings from seed trays on already prepared plots Invite a landscaper or visit a nursery to observe how plants are spaced and planted Use drawings, pictures or clips from internet to discuss environmental conditions appropriate for planting seedlings Use experiment to explain what needs are important for seedlings to survive (one set of plants getting too much water, one too little, one no sunlight and one set in area with correct conditions)

Grade 5 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<u>Care for ornamental seedlings</u> 1. Explain the importance of humidity in the seedling environment 2. Explain how to care for seedlings once they have been planted out 3. Explain why the frequency of water must be decreased, and light must be increased 4. Explain the effect of the heat on transplanted seedlings 5. Explain what pricking out is <u>Sustain all agricultural practices needing continuous maintenance</u>	<ul style="list-style-type: none"> Demonstrate and practise how to apply appropriate watering of seedlings <hr/> <i>Gr 5: 2nd year</i> <ul style="list-style-type: none"> Draw up a chart of which plants can be planted during certain periods of the year for the specific area, learners work in groups of four to make groups posters Discuss the various seeds available on the market Learners explain how to harvest seeds from plants Demonstrate to learners how to prepare a plot for sowing seeds directly while learners assist Plant ornamental seedlings from seed trays on already prepared plots Invite a landscaper or visit a nursery to observe how plants are spaced and planted <hr/> <ul style="list-style-type: none"> Use drawings, pictures or clips from internet to discuss environmental conditions appropriate for planting seedlings Use experiment to explain what needs are important for seedlings to survive (one set of plants getting too much water, one too little, one no sunlight and one set in area with correct conditions) Learners practise how to apply appropriate watering of seedlings <hr/> <i>Gr 5: 3rd year</i> <ul style="list-style-type: none"> Learners draw up individual charts of which plants can be planted during certain periods of the year for the specific area to be used in future at their homes

Grade 5 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> • Discuss the various seeds available on the market • Harvest seeds from plants • Prepare a plot for sowing seeds directly while teacher observe • Plant ornamental seedlings from seed trays on already prepared plots • Invite a landscaper or visit a nursery to observe how plants are spaced and planted <hr/> <ul style="list-style-type: none"> • Use drawings, pictures or clips from internet to discuss environmental conditions appropriate for planting seedlings • Use experiment to explain what needs are important for seedlings to survive (one set of plants getting too much water, one too little, one no sunlight and one set in area with correct conditions) • Learners explain to each other how to apply appropriate watering of seedlings
5	Gardening/ Horticulture	<u>Propagate, plant and establish ornamental plants and trees from containers into open ground</u> <ol style="list-style-type: none"> 1. Explain the criteria to be used when selecting plants for planting out 2. Select plants from stockpile or nursery and prepare for planting of plants/shrubs or trees 3. Arrange plants in the areas where they are to 	<i>Gr 5: 1st year</i> <ul style="list-style-type: none"> • Identify an appropriate area as well as plants to be propagated or planted, i.e. shade or full sun • Demonstrate how to prepare area where plants or trees are to be transplanted • Explain importance of soil preparation and watering to ensure plants to survive transplant process • Give instructions to learners on how to prepare the soil and what procedures to be followed before, during and after plants are planted

Grade 5 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		be transplanted 4. Prepare a suitable hole to plant in 5. Explain the reason for soaking plants before transplanting 6. Follow correct procedure of planting, backfilling and watering <u>Sustain all agricultural practices needing continuous maintenance</u>	<i>Gr 5 : 2nd year</i> <ul style="list-style-type: none"> • Make use of questions and answers to explain to learners on how to prepare the soil and what procedures to be followed before, during and after plants are planted • Explain and demonstrate to learners how to transplant and irrigate plants to have a better chance of survival • Learners follow instructions and transplant plants under supervision <i>Gr 5 : 3rd year</i> <ul style="list-style-type: none"> • Learners explain to younger learners and assist in how to prepare the soil and what procedures to be followed before, during and after plants are planted • Learners transplant plants guiding one another on correct procedures
6	Animal Production	<u>Demonstrate an understanding of healthy farm animals and their purpose on a farm</u> 1. Identify the visual differences in farm animal species and describe using own words 2. Identify the visual differences in farm animal breeds within species and describe using own words 3. Explain the functional purpose of farm animal species 4. Recognise external sign of good health in	<i>Gr 5 : 1st year</i> <ul style="list-style-type: none"> • Identify the different farm animals found within the area as well as the difference within a species – e.g. layers or braai chickens/dairy and beef or dairy cattle • Discuss the functional purpose of the different animals on a farm (use a chart with different products as visual resource) • Explain the negative effects of endo/ecto-parasites on the health of animals and the causes of slow growth and disease on hand of visual clips from internet • Learners observe and discuss reasons for mating behaviour in male and female animals in a group, using a dvd or clips from the internet

Grade 5 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>farm animals</p> <ol style="list-style-type: none"> Report the presence of ecto-parasites Record the growth and production rate of farm animals <p><u>Recognise basic breeding behaviour of farm animals</u></p> <ol style="list-style-type: none"> Observe normal and abnormal mating behaviour Identify successful mating amongst breeding animals Observe breeding animals for post breeding behaviour Report observation of mating and post breeding behaviour to supervisor <p><u>Apply basic animal husbandry practices</u></p> <ol style="list-style-type: none"> Describe procedures to follow and prepare for the build of animal housing Apply appropriate bedding material and temperature control to the animal housing Demonstrate how to care for young animals Apply appropriate feeding methods for 	<ul style="list-style-type: none"> Learners observe and discuss reasons for abnormal mating behaviour in male and female animals in a group, using a dvd or clips from the internet Explain to learners the importance of reporting behaviour to supervisor Discuss successful mating amongst breeding animals Use visual resources while discussing the importance, reasons and structures used for shelter/housing structures Name the different structures used for housing and complete a worksheet linking animal to their appropriate housing structures Learners demonstrate the application of appropriate bedding materials to each other, while teacher is coaching them through questioning <p><i>Gr 5 : 2nd year</i></p> <ul style="list-style-type: none"> Identify and name the different farm animals found within the area as well as the difference within a species – e.g. layers or braai chickens/dairy and beef or dairy cattle Explain the functional purpose of the different animals on a farm (use a chart with different products as visual resource) Discuss the negative effects of endo/ecto-parasites on the health of animals and the causes of slow growth and disease on hand of visual clips from internet Observe and discuss reasons for mating behaviour in male and female

Grade 5 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>different stages of animal production</p> <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p>animals in a group, using a dvd or clips from the internet</p> <ul style="list-style-type: none"> • Observe and discuss reasons for abnormal mating behaviour in male and female animals in a group, using a dvd or clips from the internet • Explain to learners the importance of reporting behaviour to supervisor • Discuss successful mating amongst breeding animals • Use visual resources while discussing the importance, reasons and structures used for shelter/housing structures • Name the different structures used for housing and complete a worksheet linking animal to their appropriate housing structures • Learners demonstrate the application of appropriate bedding materials to each other, while teacher is coaching them through questioning <p><i>Gr 5 : 3rd year</i></p> <ul style="list-style-type: none"> • Identify and name the different farm animals found within the area as well as the difference within a species – e.g. layers or braai chickens/dairy and beef or dairy cattle • Explain the functional purpose of the different animals on a farm (use a chart with different products as visual resource) • Discuss the negative effects of endo/ecto-parasites on the health of animals and the causes of slow growth and disease on hand of visual clips from internet • Observe and discuss reasons for mating behaviour in male and female

Grade 5 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p>animals in a group, using a dvd or clips from the internet</p> <ul style="list-style-type: none"> • Observe and discuss reasons for abnormal mating behaviour in male and female animals in a group, using a dvd or clips from the internet • Explain to learners the importance of reporting behaviour to supervisor • Discuss successful mating amongst breeding animals • Use visual resources while discussing the importance, reasons and structures used for shelter/housing structures • Name the different structures used for housing and complete a worksheet linking animal to their appropriate housing structures • Explain drawing of a chicken run on a worksheet. Learners measure/list materials needed to build the structure (measurements scaled down on worksheet) • Assist in building a simple structure for i.e. chickens • Demonstrate the application of appropriate bedding materials to each other, while teacher is coaching them through questioning
7	Nature and Biodiversity	<u>Nature and Biodiversity: soil conservation</u> <ol style="list-style-type: none"> 1. Understand types and physical processes of soil degradation, i.e. soil erosion, soil compaction, soil pollution 2. List the causes of soil degradation 3. Explain the importance of soil conservation for 	<p><i>Gr 5 : 1st year</i></p> <ul style="list-style-type: none"> • Describe the different types of soil degradation with the use of visual resources (pictures, videos, clips from internet) • Discuss the causes of soil degradation • Explain soil erosion using experiment (search internet/pinterest for example)
			<p><i>Gr 5 : 2nd year</i></p> <ul style="list-style-type: none"> • Describe the different types of soil degradation with the use of visual

Grade 5 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		agricultural productivity <u>Sustain all agricultural practices needing continuous maintenance</u>	resources (pictures, videos, clips from internet) <ul style="list-style-type: none"> Discuss the causes of soil degradation Learners set up experiment on soil erosion (search internet/pinterest for example) while teacher explain the process to them
			<i>Gr 5 : 3rd year</i> <ul style="list-style-type: none"> Learners describe the different types of soil degradation with the use of visual resources (pictures, videos, clips from internet) Discuss the causes of soil degradation Learners set up experiment on soil erosion (search internet/pinterest for example) explaining the process to the teacher
8	Business Practises	1. <u>Apply basic skills in storage management and stocktaking</u> Prepare storage space to receive stock through cleaning and disinfecting 2. Identify appropriate space for storage of different products and equipment 3. Understand the prevention of contamination 4. Apply basic stock inventory taking, issuing and receiving of stock 5. Identify the appropriate re-order level and reporting on stock levels for prompt re-ordering <u>Understand basic costing (income/expenditure)</u>	<i>Gr 5 : 1st year</i> <ul style="list-style-type: none"> Discuss and explain how storage space should be organised to ensure easy access to equipment needed Assist in organising storage space After harvesting of produce, learners assist in making a list of all products roughly on an empty page Discuss and compare quality of products with products available in retail Discussions and learners assist in practical application of activities regarding packaging and display of products Explain to learners how to draw up a basic budget reflecting expenditure and income Use simple spreadsheet/journal to explain the concept

Grade 5 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		1. Demonstrate how to draw up a basic budget reflecting expenditure and income <u>Understand entrepreneurship in agriculture</u> 1. Be familiar with opportunities, outlets and basic requirements of local markets 2. Understand the differences in quality of products and be aware of local preferences 3. Compare prices of various outlet to price a products 4. Understand the importance of packaging and display of products 5. Set up and man a stall at an outlet in the immediate community <u>Sustain all agricultural practices needing continuous maintenance</u>	<ul style="list-style-type: none"> • Make use of produce to practically discuss and compare the quality of products • Have products and pricelist from an outlet in the community available to discuss pricing of a product. Make learners aware of the cost of expenses in the process of cultivating product • Discuss the importance of packaging using samples from the industry. • Point out what materials are available through implementing recycling to reduce cost • Learners assist in the setting up of a stall
			<i>Gr 5: 2nd year</i> <ul style="list-style-type: none"> • Learners practically explain how to organise storage space to ensure easy access to equipment needed • Learners organise storage space on instruction of teacher • After harvesting of produce, learners make a list of all products roughly on an empty page • Learners discuss and compare quality of products with products available in retail • Learners practically pack produces in appropriate way and display produce correctly while teacher supervise • Explain to learners how to draw up a basic budget reflecting expenditure and income

Grade 5 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> Learners use simple spreadsheet/journal to implement the concept by following the teachers instructions Make use of produce to practically discuss and compare the quality of products Have products and pricelist from an outlet in the community available to discuss pricing of a product. Make learners aware of the cost of expenses in the process of cultivating product Discuss marketing skills needed Discuss the importance of packaging using samples from the industry Point out what materials are available through implementing recycling to reduce cost Learners set up a stall at school for teachers and parents to support by buying their produce
			<p><i>Gr 5 : 3rd year</i></p> <ul style="list-style-type: none"> Learners practically organise storage space to ensure easy access to equipment needed while teacher observe After harvesting of produce, learners make a list of all products roughly on an empty page, transfer the list to a more formal worksheet or to a simple spreadsheet on the computer Learners discuss/compare quality of products with products available in retail and price produce Learners practically pack produces in appropriate way and display

Grade 5 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p>produce correctly while teacher supervise</p> <ul style="list-style-type: none"> Learners draw up a basic budget reflecting expenditure and income Learners use simple spreadsheet/journal to implement the concept by following the teachers instructions Make use of produce to practically discuss and compare the quality of products Have products and pricelist from an outlet in the community available to discuss pricing of a product. Make learners aware of the cost of expenses in the process of cultivating product Discuss the importance of packaging using samples from the industry Point out what materials are available through implementing recycling to reduce cost Learners practise marketing skills at school and in the community Learners set up a stall at school for teachers and parents to support by buying their produce
9		<u>Revise and sustain activities taught in previous weeks and agricultural practices needing continuous maintenance</u> <ol style="list-style-type: none"> Understand soil preparation Process of making natural fertilisers 	<p>Gr 5: 1st year</p> <ul style="list-style-type: none"> Identify and name different methods of composting Make different kinds of natural fertiliser Prepare for seed growing Identify appropriate area to plant Name and identify the different structures used for housing of animals

Grade 5 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		3. Propagate plants from seeds/cutting and grafting 4. Prepare for planting of plants/shrubs/trees 5. Procedure to follow and preparation for the building of animal housing 6. Soil degradation, i.e. soil erosion, soil compaction and soil pollution 7. Importance of packaging and display of products	<ul style="list-style-type: none"> Describe the different types of soil degradation Explain the importance and appropriateness of packaging in the industry
			<i>Gr 5 : 2nd year</i> <ul style="list-style-type: none"> Explain different methods of composting with guidance of teacher Repack worm farm Transplant seedlings Prepare soil for planting and explain procedures to be followed Explain the importance and reasons for animal housing Discuss the causes of soil degradation Practically pack produce
			<i>Gr 5 : 3rd year</i> <ul style="list-style-type: none"> Learners explain different methods of composting to each other Explain the use of the fluid from worm farm as a natural fertiliser Prepare cuttings for new plants Transplant plants/shrubs/trees according to correct procedure Explain the process of building a simple structure for animal housing Discuss process of experiment on soil erosion Set up a stall for selling produce
10	Assessment	The week allocated to formal assessment should be integrated across the nine (9) weeks planned for teaching and learning. The assessment will consist of practical tasks with 80% weighting and informal theoretical assessment with 20% weighting.	

Grade 5 Term 2			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<u>Sustain all agricultural practices needing continuous maintenance</u>	

Assessment

Assessment is formally recorded during four (4) practical sessions with a minimum of four (4) skills reported. Learners, regardless of abilities, shall be assessed on the same skill. The following serves as suggestion of skills to record and report on.

	<i>Gr 5 : 1st year</i>	<i>Gr 5 : 2nd year</i>	<i>Gr 5 : 3rd year</i>
Week 2	Make different kinds of natural fertilizer	Repack the worm farm	Use fluid from worm farm as natural fertilizer
Week 3	Prepare for seed growing	Transplant seedlings	Prepare cuttings for new plants
Week 4	Plant ornamental seedlings from seed trays	Apply appropriate watering of seedlings	Apply appropriate watering of seedlings
Week 5	Prepare area where plants or trees are to be transplanted	Prepare soil and use procedures before, during and after plants are planted	Prepare soil and use procedures before, during and after plants are planted
Week 6	Identify and name different structures used for shelter/housing	Discuss the importance and reasons used for shelter/housing	Assist in building simple structure for i.e. chickens
Week 7	Describe the different types of soil degradation	Explain the causes of soil degradation	Set up an experiment on soil erosion
Week 8	Explain the importance of appropriate packaging	Practically pack produce	Display packed produce in appropriate way

Four theoretical activities are assessed and recorded, however, a minimum of 1 theoretical activity is reported on. The following serves as suggestions of theoretical activities to report on.

Week 6	Link animals to appropriate shelter/housing structures on a worksheet	Link animals and their names to appropriate shelter/housing structure on a worksheet	Measure the material needed to build a shelter/structure scaled down on a worksheet
Week 8	Complete simple spreadsheet/journal to explain a basic budget reflecting expenditure and income using a completed worksheet as reference	Complete simple spreadsheet/journal to explain a basic budget reflecting expenditure and income	Draw up simple spreadsheet/journal to explain a basic budget reflecting expenditure and income

3.2.7 Grade 5 Term 3

Grade 5 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
1	General Farming	<p><u>Apply basic and general safety practices</u></p> <ol style="list-style-type: none"> 1. Apply personal hygiene 2. Understand what basic food safety practices are 3. Identify and apply the safety measure regarding the use of basic agricultural tools and equipment 4. Understand the basic hygienic requirements of organic food 5. Understand the importance of protective clothing <p><u>Describe and recognise the roles and requirements of water in plants</u></p> <ol style="list-style-type: none"> 1. Explain how the amount of water and frequency of watering influences the growth of a plant 2. Identify the water requirements of different plants 	<p><i>Gr 5 : 1st year</i></p> <p>Discuss:</p> <ul style="list-style-type: none"> • Reasons for personal hygiene • Basic food safety practices and hand wash techniques • Safety measures regarding the use of basic agricultural tools and equipment • Hygienic requirement when dealing with organic food • Importance of protective clothing • Discuss the water requirements of different plants using the garden and pot plants as examples • Explain reasons for the correct time of day to water plants using pictures as resources • Discuss effects of watering as well as amount of watering during different seasons • Water plants during different times of the day as an experiment to observe how plants react and how long soil will stay moist (take a sequence of photos to display if possible) • Irrigate the crops which were planted with appropriate watering method. Turns are made so as to give all a chance

Grade 5 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>3. Select the right method of watering and the correct time of day to water plants</p> <p>4. Explain how climatic conditions affect watering</p> <p>5. Analyse how different types of soil affect watering of plants</p> <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p><i>Gr 5: 2nd year</i></p> <p>Discuss:</p> <ul style="list-style-type: none"> • Reasons for personal hygiene • Basic food safety practices and hand wash techniques • Safety measures regarding the use of basic agricultural tools and equipment • Hygienic requirement when dealing with organic food • Importance of protective clothing • Learners discuss and explain the water requirements of different plants to each other, using the garden and pot plants as examples • Explain reasons for the correct time of day to water plants using pictures as resources • Discuss effects of watering as well as amount of watering during different seasons • Water plants during different times of the day as an experiment to observe how plants react and how long soil will stay moist (take a sequence of photos to display if possible) • Learners record the reaction of plants through drawing their own sequence of observation • Irrigate the crops which were planted with appropriate watering method. Turns are made so as to give all a chance

Grade 5 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p><i>Gr 5: 3^d year</i></p> <p>Discuss:</p> <ul style="list-style-type: none"> • Reasons for personal hygiene • Basic food safety practices and hand wash techniques • Safety measures regarding the use of basic agricultural tools and equipment • Hygienic requirement when dealing with organic food • Importance of protective clothing <ul style="list-style-type: none"> • Learners discuss and explain the water requirements of different plants to each other, using the garden and pot plants as examples • Learners explain to teacher the reasons for the correct time of day to water plants using pictures as resources • Discuss effects of watering as well as amount of watering during different seasons • Water plants during different times of the day as an experiment to observe how plants react and how long soil will stay moist (take a sequence of photos to display if possible) • Learners record the reaction of plants through drawing their own sequence of observation and write words/short sentence underneath (according to their ability) • Learners irrigate the crops which were planted with appropriate watering method. Turns are made so as to give all a chance

Grade 5 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
2	General Farming	<u>Identify different methods of irrigation appropriate to environmental circumstances and installing of irrigation if appropriate</u> 1. Identify an irrigation system for a specific area 2. Explain an understanding of irrigation w.r.t crop yield 3. Design a layout for the most effective use of piping for an area 4. Explain how water pressure and friction affect the piping used for irrigation 5. Explain why certain fittings are used in different cases 6. Install an irrigation system for a specific area 7. Irrigate a crop to maintain standard moisture content <u>Sustain all agricultural practices needing continuous maintenance</u>	<i>Gr 5 : 1st year</i> <ul style="list-style-type: none"> Discuss different forms of irrigation that can be used in specific areas <ul style="list-style-type: none"> - hose pipes - sprayers - industrial irrigation Show learners samples of the different components used in industrial irrigation Discuss which irrigation system would be suitable and affordable to the schools needs Irrigate crops according to specific needs <p>*Activity for enrichment - visit a farm where industrial irrigation is used or a garden where different irrigation methods are used</p>
			<i>Gr 5 : 2nd year</i> <ul style="list-style-type: none"> Discuss different forms of irrigation that can be used in specific areas <ul style="list-style-type: none"> - hose pipes - sprayers - industrial irrigation Show learners samples of the different components used in industrial irrigation Discuss which irrigation system would be suitable and affordable to the schools needs Design a small layout explaining the effective use of piping for irrigation

Grade 5 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p>in an area, explain to learners as the process progress</p> <ul style="list-style-type: none"> Irrigate crops according to specific needs <p>*Activity for enrichment - visit a farm where industrial irrigation is used or a garden where different irrigation methods are used</p>
			<p><i>Gr 5 : 3rd year</i></p> <ul style="list-style-type: none"> Discuss different forms of irrigation that can be used in specific areas <ul style="list-style-type: none"> hose pipes sprayers industrial irrigation Show learners samples of the different components used in industrial irrigation Discuss which irrigation system would be suitable and affordable to the schools needs Design a small layout explaining the effective use of piping for irrigation in an area, explain to learners as the process progress Irrigate crops according to specific needs <p>*Activity for enrichment - visit a farm where industrial irrigation is used or a garden where different irrigation methods are used</p>

Grade 5 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
3	General Farming	<u>Identify and understand manual and chemical weed control</u> <ol style="list-style-type: none"> 1. Identify different types of weeds in designated pieces of land according to weed types and weed growth periods 2. Identify factors (i.e. soil dampness, weed size and reestablishment of weeds) affecting successful weed control to ensure best use of effort, cost and time 3. Explain the reason for hand or manual control of weeds 4. Explain the reason for hand or manual control of weeds in relation to other weed control methods 5. Observe chemical weed control methods 6. Understand the safety precaution when chemical weeding is selected (wearing of masks and goggles) 7. Prepare equipment to be used for weeding according to workplace procedures, leave equipment in a safe and ready to use 	<p><i>Gr 5: 1st year</i></p> <ul style="list-style-type: none"> • Identify and name common types of weeds in garden (either in general garden, or gardens to be, or in gardens neglected over a holiday period) • Learners demonstrate and explain manual weeding • Perform manual weeding according to workplace procedures i.e. hand pull, hoe and slash to required height • Practically participation in weeding of individual plots in group garden • Handle and dispatch waste from weeding process according to workplace procedures <p>*Teacher's tip: each learners choose 5 weeds, dry the weeds in old telephone directories, visit a herbarium for assistance in identifying the names and write the names next to the weed</p> <p><i>Gr 5: 2nd year</i></p> <ul style="list-style-type: none"> • Identify and name common types of weeds in garden and discuss alternative ways to manual weeding to eradicating it (use photos, pictures from magazines or internet clips) • Discuss and identify safety equipment as well as safety precautions when chemical weeding is selected (wearing of masks and goggles) • Demonstrate the use of equipment • Handle and dispatch waste from weeding process according to workplace procedures

Grade 5 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		condition and report defaults i.e. sharpening or minor repairs 8. Handle and dispatch waste from weeding process according to workplace procedures <u>Sustain all agricultural practices needing continuous maintenance</u>	<p>*Teacher's tip: encourage learners to find out what the traditional uses for some weed are in their communities</p> <p>*Activity for enrichment – visit a farm where chemical weeding is used to observe the process</p> <hr/> <p><i>Gr 5: 3rd year</i></p> <ul style="list-style-type: none"> Identify and name common types of weeds in garden and discuss alternative ways to manual weeding to eradicating it (use photos, pictures from magazines or internet clips) Discuss and identify safety equipment as well as safety precautions when chemical weeding is selected (wearing of masks and goggles) Learners observe and assist in chemical weeding where needed Explain and demonstrate the importance of leaving equipment in a safe and ready to use condition and report defaults i.e. sharpening or minor repairs Handle and dispatch waste from weeding process according to workplace procedures <p>*Teacher's tip: encourage learners to find out what the traditional uses for some weed are in their communities or invite a member of the community who is knowledgeable about the uses of weeds for medicinal or gardening purposes</p>

Grade 5 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			*Activity for enrichment – visit a farm where chemical weeding is used to observe the process
4	Plant Production	<u>Planting a range of crops according to correct planning, spacing and depth of the plant material</u> <ol style="list-style-type: none"> 1. Use tools correctly for every specific crop 2. Use equipment correctly in order to space plants according to the requirements of the specific crop 3. Explain intercropping and companion planting when planting in a small area 4. Understand the necessity to space, place and regulate planting depth for every specific crop planted to ensure optimum yield and quantity of crops 5. Explain differences in process of sowing seeds and planting seedlings 6. Understand the basic effect of temperature on plant material 7. Identify plants suffering from root shock and explain the cause 	<i>Gr 5 : 1st year</i> <ul style="list-style-type: none"> • Poster with illustrations of tools to be used • Demonstrate how to use equipment correctly • Use available tools and a plant line for process of planting Crops suitable to be planted are identified – either seeds or seedlings • Demonstrate differences in process of sowing seeds and planting seedlings • Demonstrate suitable (companion/intercropping) planting where after learners individually plant crops according to specific instructions • Explain rotation planting of crops on hand of an illustration • Explain to pupils the effect if spacing of crops is not done correctly • Plant different crops • Learners water plants with different equipment available • Explain reason for keeping plant material ready for planting moist and sheltered with experiment • Show learners how to handle seedlings correctly • Provide newly planted material with sufficient water shortly after planting • Remove and replace newly planted material that will not survive

Grade 5 Term 3

WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p><u>Handle planting material correctly for the successful establishment of a specific crop</u></p> <ol style="list-style-type: none"> 1. Explain why plant material ready for planting is kept moist and sheltered 2. Provide newly planted material with sufficient water shortly after planting 3. Remove and replace newly planted material that will not survive 4. Remove diseased plants from the planting area to prevent contact with healthy plants <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<ul style="list-style-type: none"> • Remove diseased plants from the planting area to prevent contact with healthy plants <p><i>Gr 5 : 2nd year</i></p> <ul style="list-style-type: none"> • Poster with illustrations of tools to be used • Learners demonstrate to each other on how to use equipment correctly • Learners use available tools and a plant line for process of planting • Crops suitable to be planted are identified – either seeds or seedlings • Demonstrate differences in process of sowing seeds and planting seedlings • Practical demonstration of suitable (companion/intercropping) planting where after learners individually plant crops according to specific instructions • Prepare a small area to be used for rotation planting of crops after discussing rotation planting on hand of an illustration • Explain to pupils the effect if spacing of crops is not done correctly • Plant different crops • Water plants with different equipment available • Explain reason for keeping plant material ready for planting moist and sheltered with experiment • Show learners how to handle seedlings correctly • Provide newly planted material with sufficient water shortly after planting

Grade 5 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> Remove and replace newly planted material that will not survive Remove diseased plants from the planting area to prevent contact with healthy plants
			<p><i>Gr 5 : 3^d year</i></p> <ul style="list-style-type: none"> Learners demonstrate to each other on how to use equipment correctly Use available tools and a plant line for process of planting Crops suitable to be planted are identified – either seeds or seedlings Demonstrate differences in process of sowing seeds and planting seedlings Practical demonstration of suitable (companion/intercropping/rotation) planting where after learners individually plant crops according to specific instructions Explain the effect if spacing of crops is not done correctly Plant different crops Water plants with different equipment available Explain reason for keeping plant material ready for planting moist and sheltered with experiment Show learners how to handle seedlings correctly Provide newly planted material with sufficient water shortly after planting Remove and replace newly planted material that will not survive Remove diseased plants from the planting area to prevent contact with

Grade 5 Term 3

WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<u>Sustain all agricultural practices needing continuous maintenance</u>	<ul style="list-style-type: none"> • Prepare a plot in a small garden for permaculture planting (dig plot over, add manure, cover with wet newspaper and then cover it with dry grass) with the guidance of the teacher • Plant seedlings while teacher guide and observe • Explain the advantages of permaculture regarding food security within communities • Demonstrate how to plan and make a garden only using the available materials • Prepare an area where the permaculture principles are used • Describe and name plants that repel insects <p><i>Gr 5 : 3rd year</i></p> <ul style="list-style-type: none"> • Discuss water requirements of different plants/crops on school grounds • Identify and explain irrigation methods used on school ground • Maintain irrigation according to needs of plants/crops on a regular basis • Explain what their understanding is of permaculture gardening • Plant plants/seedling using permaculture principles • Describe pests and ecological ways to combat them – naming and planting certain plants to repel insects
6	Animal Production	<u>Observe, handle and move of farm animals</u>	<p><i>Gr 5 : 1st year</i></p> <ul style="list-style-type: none"> • Practical demonstrations using video clips of animal behaviour • Learners partake in practical activities in handling and moving of small

Grade 5 Term 3

WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<ol style="list-style-type: none"> 1. Demonstrate and observe animal behaviour and physical attributes 2. Demonstrate the ability to move animals in a controlled manner 3. Explain the use and purpose of a restraining facility 4. Demonstrate the handling and restraint of an animal 5. Identify the equipment needed to restrain animals – immobiliser or neck clamp 6. Discuss the effect of incorrect handling on farm animals (harm and effect) <p><u>Recognise defensive behaviour in animals</u></p> <ol style="list-style-type: none"> 1. Describe anatomical features that are used in defensive behaviour e.g. hooves, fangs 2. Identify symptoms and causes of defensive behaviour in animals 3. Describe the methods used to reduce the manifestation of defensive behaviour in animals 4. Describe and handle relevant equipment to manage animals 	<p>breeds of farm animals</p> <ul style="list-style-type: none"> • Demonstrate and practise how to walk between animals so that they remain calm. He/she explains how he positions himself so that animals can start moving in a controlled manner • Watch a video of defensive behaviour in animals or visit a farm where the defensive behaviour of animals is shown to them • Select pictures or videos of injuries caused by animals to highlight the importance of safety when working with animals • Demonstrate the handling of relevant equipment to manage animals allowing learners to practice working with equipment under supervision • Label different types of feed • Explain reasons for reporting feed levels and irregularities • Assist in selecting suitable feed type and quantity for specific animals • Assist in preparing and filling feeding/drinking troughs • Practical session where learners feed the animals while teacher is guiding them • Describe how to maintain water, feed supplies and feeding equipment <p>*Activity for enrichment – a visit by an animal feed consultant/agent is advised and will benefit the teaching process</p>
			<i>Gr 5 : 2nd year</i>

Grade 5 Term 3

WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p><u>Apply standard animal feeding procedures</u></p> <ol style="list-style-type: none"> 1. Demonstrate the ability to report of feed levels 2. Identify and report on irregularities 3. Select appropriate feed type and quantity 4. Demonstrate the ability to identify spoilage in feed 5. Apply correct feeding practices under supervision 6. Maintain water, feed supplies and feeding equipment <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<ul style="list-style-type: none"> • Practical demonstrations using video clips of animal behaviour • Learners partake in practical activities in handling and moving of small breeds of farm animals • Demonstrate and practise how to walk between animals so that they remain calm. He/she explains how he positions himself so that animals can start moving in a controlled manner • Learners watch a video of defensive behaviour in animals or visit a farm where the defensive behaviour of animals is shown to them • Select pictures or videos of injuries caused by animals to highlight the importance of safety when working with animals • Demonstrate the handling of relevant equipment to manage animals allowing learners to practice working with equipment under supervision • Label different types of feed • Explain reasons for reporting feed levels and irregularities • Learners select suitable feed type and quantity for specific animals under supervision • Learners prepare and fill feeding/drinking troughs • Practical session where learners feed the animals while teacher is guiding them • Report and assist in maintaining water, feed supplies and feeding equipment

Grade 5 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p>*Activity for enrichment – a visit by an animal feed consultant/agent is advised and will benefit the teaching process</p> <hr/> <p><i>Gr 5 : 3rd year</i></p> <ul style="list-style-type: none"> • Practical demonstrations using video clips of animal behaviour • Learners partake in practical activities in handling and moving of small breeds of farm animals • Demonstrate and practise how to walk between animals so that they remain calm. He/she explains how he positions himself so that animals can start moving in a controlled manner where after learners interact with the animals in the same way • Learners watch a video of defensive behaviour in animals or visit a farm where the defensive behaviour of animals is shown to them • Select pictures or videos of injuries caused by animals to highlight the importance of safety when working with animals • Demonstrate the handling of relevant equipment to manage animals allowing learners to practice working with equipment under supervision • Label different types of feed • Explain reasons for reporting feed levels and irregularities • Learners select suitable feed type and quantity for specific animals under supervision

Grade 5 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> Learners prepare and fill feeding/drinking troughs Practical session where learners feed the animals while teacher is guiding them Report and assist in maintaining water, feed supplies and feeding equipment <p>*Activity for enrichment – a visit by an animal feed consultant/agent is advised and will benefit the teaching process</p>
7	Environmental Education	<p><u>Community and Heritage: effect of natural disasters</u></p> <ol style="list-style-type: none"> Identify natural disaster that can have an effect on agriculture Discuss the effect of natural disasters on agriculture Explain safety measures needed to prevent disasters Know what safety measures to be taken during events of disasters <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p><i>Gr 5: 1st year</i></p> <ul style="list-style-type: none"> List and name natural disasters using pictures or video/internet clips (i.e., droughts, flooding, fires, wind damage) Complete worksheet by sorting pictures into appropriate categories (i.e. drought, floods, fire and wind damage) Explain the effect of natural disaster on hand of pictures or video/internet clips Explain safety measures needed to prevent disasters Discuss safety measures <p><i>Gr 5: 2nd year</i></p> <ul style="list-style-type: none"> List and name natural disasters using pictures or video/internet clips (i.e., droughts, flooding, fires, wind damage) after teacher briefly revised the disasters Discuss the effect of natural disaster on hand of pictures or video/internet clips

Grade 5 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> Find names of appropriate disaster and glue under picture Answer coaching questions on safety measures to prevent a disaster Discuss safety measures to be taken during events of disasters
			<i>Gr 5: 3^d year</i> <ul style="list-style-type: none"> Complete a worksheet with pictures, matching the names of natural disasters with words (i.e., droughts, flooding, fires, wind damage) after teacher briefly revised the disasters Discuss the effect of natural disaster on hand of pictures or video/internet clips Choose correct pictures from magazine and glue it under the name of the disaster Explain safety measures to prevent a disaster Discuss safety measures to be taken during events of disasters
8	Business Practises	<u>Apply basic skills in storage management and stocktaking</u> <ol style="list-style-type: none"> 1. Prepare storage space to receive stock through cleaning and disinfecting 2. Identify appropriate space for storage of different products and equipment 3. Understand the prevention of contamination 4. Apply basic stock inventory taking, issuing 	<i>Gr 5: 1st year</i> <ul style="list-style-type: none"> Explain how to organise storage space to ensure easy access to equipment needed Organise storage space on instruction of teacher After harvesting of produce, learners make a list of all products roughly on an empty page Complete worksheet: list products, with drawings/selecting picture from magazines, etc., harvested Discuss and compare quality of products with products available in retail

Grade 5 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>and receiving of stock</p> <p>5. Identify the appropriate re-order level and reporting on stock levels for prompt re-ordering</p> <p><u>Understand basic costing (income/expenditure)</u></p> <p>1. Demonstrate how to draw up a basic budget reflecting expenditure and income</p> <p><u>Understand entrepreneurship in agriculture</u></p> <p>1. List and describe opportunities, outlets and basic requirements of local markets</p> <p>2. Understand the differences in quality of products and be aware of local preferences</p> <p>3. Compare prices of various outlet to price a products</p> <p>4. Understand the importance of packaging and display of products</p> <p>5. Set up and man a stall at an outlet in the immediate community</p> <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<ul style="list-style-type: none"> • Pack produces in appropriate way and display produce correctly while teacher supervise • Explain to learners how to draw up a basic budget reflecting expenditure and income • Use simple spreadsheet/journal to implement the concept by following the teachers instructions • Discuss and compare the quality of products • Have products and pricelist from an outlet in the community available to discuss pricing of a product. Make learners aware of the cost of expenses in the process of cultivating product • Discuss marketing skills needed • Discuss the importance of packaging using samples from the industry • Point out what materials are available through implementing recycling to reduce cost • Set up a stall at school for teachers and parents to support by buying their produce <p><i>Gr 5 : 2nd year</i></p> <ul style="list-style-type: none"> • Organise storage space to ensure easy access to equipment needed while teacher observe • After harvesting of produce, learners make a list of all products roughly

Grade 5 Term 3

WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p>on an empty page</p> <ul style="list-style-type: none"> • Transfer the list to a more formal worksheet or to a simple spreadsheet on the computer copying a sample given • Discuss/compare quality of products with products available in retail and price produce • Pack produces in appropriate way and display produce correctly while teacher supervise • Draw up a basic budget reflecting expenditure and income • Use simple spreadsheet/journal to implement the concept by following the teachers instructions • Make use of produce to practically discuss and compare the quality of products • Have products and pricelist from an outlet in the community available to discuss pricing of a product. Make learners aware of the cost of expenses in the process of cultivating product • Discuss the importance of packaging using samples from the industry • Point out what materials are available through implementing recycling to reduce cost • Learners practise marketing skills at school and in the community • Learners set up a stall at school for teachers and parents to support by buying their produce

Grade 5 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p><i>Gr 5: 3rd year</i></p> <ul style="list-style-type: none"> Learners practically organise storage space to ensure easy access to equipment needed, call teacher when completed so that teacher can do a check After harvesting of produce, learners make a list of all products roughly on an empty page Transfer the list to a more formal worksheet or to a simple spreadsheet on the computer Discuss/compare quality of products with products available in retail and price produce Pack produces in appropriate way and display produce correctly, teacher do quality check Draw up a basic budget reflecting expenditure and income Use simple spreadsheet/journal to implement the concept by following the teachers instructions Make use of produce to practically discuss and compare the quality of products Avail products and pricelist from an outlet in the community to discuss pricing of a product. Make learners aware of the cost of expenses in the process of cultivating products Discuss the importance of packaging using samples from the industry

Grade 5 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> Point out what materials are available through implementing recycling to reduce cost Practise marketing skills at school and in the community Set up a stall at school for teachers and parents to support by buying their produce
9		<u>Revise and sustain activities taught in previous weeks and agricultural practices needing continuous maintenance</u> <ol style="list-style-type: none"> Select right method of watering and correct time of day to water plants Identify an irrigation system for a specific area Weed control methods Understand the necessity to space, place and regulate planting depth Explain basic principles of permaculture Animal feeding procedures Identify natural disasters that can have an effect on agriculture Selecting, pricing and packaging of products 	<p><i>Gr 5 : 1st year</i></p> <ul style="list-style-type: none"> Irrigate crops with appropriate watering method Name different forms of irrigation Weed individual plot in garden with appropriate method Use correct tools for process of planting (correct space, place and depth) Prepare a plot for permaculture planting Label different types of feed List and name natural disasters Compare the quality of products <p><i>Gr 5 : 2nd year</i></p> <ul style="list-style-type: none"> Indicate correct time of day to water plants and water plants Explain which irrigation system would be suitable where Select appropriate safety precautions when chemical weeding is selected Demonstrate process of sowing seeds or planting seedlings Explain the advantages of permaculture Select suitable feed types and quantity for specific animals

Grade 5 Term 3			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> • Explain the effects of natural disaster • List expenses in the process of cultivating products
			<i>Gr 5 : 3^d year</i> <ul style="list-style-type: none"> • Irrigate crop correctly and at appropriate time of day • Choose correct irrigation system for a specific area indicated with pictures • Assist in chemical weeding where needed • Choose suitable planting method – companion or intercropping or rotation • Plant plants/seedlings using permaculture principles • Report feed levels and irregularities • Explain safety measures during a disaster • List expenses in process of cultivating a product
10	Assessment	<p>The week allocated to formal assessment should be integrated across the nine (9) weeks planned for teaching and learning. The assessment will consist of practical tasks with 80% weighting and informal theoretical assessment with 20% weighting.</p> <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	

Assessment

Assessment is formally recorded during four (4) practical sessions with a minimum of four (4) skills reported. Learners, regardless of abilities, shall be assessed on the same skill. The following serves as suggestion of skills to record and report on.

	<i>Gr 5 : 1st year</i>	<i>Gr 5 : 2nd year</i>	<i>Gr 5 : 3rd year</i>
Week 2	Name different forms of irrigation	Explain irrigation system suitable	Irrigate crop correctly at appropriate time of day
Week 3	Weed plot in garden with appropriate method	Explain safety precautions for chemical weeding	Assist in chemical weeding where needed
Week 4	Use correct tools for process of planting	Execute the process of sowing seeds or planting seedlings	Choose suitable planting method
Week 5	Prepare plot for permaculture planting	Explain advantages of permaculture	Plants seedlings using permaculture principles
Week 6	Label different types of feed	Select feed types/quantity for specific animals	Report feed levels and irregularities
Week 7	List and name natural disasters	Explain the effects of natural disaster	Explain safety measures during a disaster
Week 8	Compare the quality of products	Explain expenses in the process of cultivating products	List expenses in process of cultivating a product

Four theoretical activities are assessed and recorded, however, a minimum of 1 theoretical activity is reported on. The following serves as suggestions of theoretical activities to report on.

Week 7	Sort pictures in categories on worksheet	Glue names of disaster under picture	Find and describe correct pictures to each disaster
Week 8	List products with pictures/drawings, etc	Transfer list to worksheet from sample	Transfer list to worksheet/spreadsheet

3.2.8 Grade 5 Term 4

Grade 5 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
1	General Farming	<p><u>Apply basic and general safety practices</u></p> <ol style="list-style-type: none"> 1. Apply personal hygiene 2. Understand what basic food safety practices are 3. Identify and apply the safety measure regarding the use of basic agricultural tools and equipment 4. Understand the basic hygienic requirements of organic food 5. Understand the importance of protective clothing <p><u>Identify limitation factors like insects, pests and diseases and the damage it can cause</u></p> <ol style="list-style-type: none"> 1. Recognise different insects and establish the harmful ones for specific crops 2. Understand that all insects have a purpose in an ecosystem 3. Establish eco-friendly means to diminish the 	<p>Gr 5 : 1st year</p> <p>Discuss</p> <ul style="list-style-type: none"> • Reasons for personal hygiene • Basic food safety practices and hand wash techniques • Safety measures regarding the use of basic agricultural tools and equipment • Hygienic requirement when dealing with organic food • Importance of protective clothing • Collect insect from garden with a net • Investigate the insects through a magnifying glass and separate the harmful ones from the beneficial ones • Identify which insects have which affect on crops/plants in the area • Learners produce their own chart, using agriculture magazines (i.e. Farmers Weekly of the Landbou Weekblad) for examples of different insects • Identify which pests are to be controlled • Discuss best way to rid garden of said pests – depending on severity of occurrence – eco-friendly/natural ways or through using agrochemical products

Grade 5 Term 4

WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>harmful effects of certain insects</p> <p>4. Recognize insects that can assist in controlling harmful ones (beneficial garden creatures), i.e. ladybirds controlling aphids</p> <p>5. Understand measures taken to prevent the killing of friendly insects</p> <p>6. Explain the reason for having bees in the garden</p> <p><u>Understand the application of natural and agrochemical products in a safe, effective and responsible manner with consideration of the environment</u></p> <p>1. Identify pests to be removed with natural products or chemically</p> <p>2. Prepare equipment and natural/chemical products to control pests</p> <p>3. Minimized use of chemicals to control insects</p> <p>4. Apply products according to safety procedures</p> <p>5. Explain the application of ecological pest control and implement an integrated control</p>	<ul style="list-style-type: none"> Explain to learners the advantages and disadvantages of manual, natural or chemical control Demonstrate the different ways of controlling pests where after pupils continue on their own <p><i>Gr 5 : 2nd year</i></p> <p>Briefly remind learners re;</p> <ul style="list-style-type: none"> Reasons for personal hygiene Basic food safety practices and hand wash techniques Safety measures regarding the use of basic agricultural tools and equipment Hygienic requirement when dealing with organic food Importance of protective clothing <ul style="list-style-type: none"> Identify and collect insects that have a negative effect on crops/plants in the area Investigate the insects through a magnifying glass List insects as harmful or eco-friendly on a worksheet Explain how certain insect (ecological pest control) can be implemented in and integrated program Explain to learners how certain insect should be protected, i.e., bees, ladybirds, etc List these insects on a poster and display it prominently

Grade 5 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>program</p> <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<ul style="list-style-type: none"> • Explain plant diseases to learners with pictures • Demonstrate the different ways of controlling pests and diseases while learners assist
			<p><i>Gr 5 : 3rd year</i></p> <p>Briefly remind learners re;</p> <ul style="list-style-type: none"> • Reasons for personal hygiene • Basic food safety practices and hand wash techniques • Safety measures regarding the use of basic agricultural tools and equipment • Hygienic requirement when dealing with organic food • Importance of protective clothing <ul style="list-style-type: none"> • Identify and name insects that have a negative effect on crops/plants in the area • Circle harmful insects on a worksheet • Learners explain how certain insect (ecological pest control) can be implemented in and integrated program and why certain insects should be protected • Learners make individual poster listing eco-friendly insects on and display it prominently • Explain plant diseases to learners with pictures and make learners aware of the negative impact it can have on production • Demonstrate the different ways of controlling pests and diseases while

Grade 5 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			learners assist
2	Plant Production	<u>Harvest agricultural crops by using basic harvesting tools</u> <ol style="list-style-type: none"> Analyse vegetable or fruit appearance Establish internal requirements for good quality vegetables/fruit, i.e. flavour, colour, insect damage Understand methods of testing for the maturity and ripeness of the crop Identify changes that take place during the ripening process Understand the correct handling of crop/fruit as a factor producing a superior product, ensuring no or minimum damage Recognise inferior quality products Understanding of means to separate inferior quality products i.e. separate bins or containers to prevent them from rotting Use basic harvesting tools to harvest specific 	<i>Gr 5 : 1st year</i> <ul style="list-style-type: none"> Establish if crops/fruit are ready to be harvested Demonstration with examples of different crops Poster showing stages of crops Use of sensory cues; sight, smell and touch to be developed Discuss importance of harvesting area being clean from waste material Demonstrate with appropriate tools, i.e. machete to harvest cabbage or scissors to harvest chillies Learners actively partake in all the processes after discussions
			<i>Gr 5 : 2nd year</i> <ul style="list-style-type: none"> Report when crops/fruit are ready to be harvested Demonstration with examples of different crops Use of sensory cues; sight, smell and touch to be developed Explain importance of harvesting area being clean from waste material Select and demonstrate correct methods of harvesting with appropriate tools, i.e. machete to harvest cabbage or scissors to harvest chillies Partake in harvesting crops Discuss where crops/fruit will be stored after harvesting

Grade 5 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>crops</p> <p>9. Understand the use, cleaning and storage of basic harvesting tools before and after use</p> <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p>Gr 5 : 3rd year</p> <ul style="list-style-type: none"> • Establish and report when crops/fruit are ready to be harvested • Explain importance of harvesting area being clean from waste material • Select and demonstrate correct methods of harvesting with appropriate tools, i.e. machete to harvest cabbage or scissors to harvest chillies • Partake in harvesting crops • Explanation by learners where crops/fruit will be stored after harvesting where after the take part in the process of storing the produce
3	Plant Production	<p><u>Demonstrate an understanding of crop preservation</u></p> <p>1. Understand procedures in food or beverage manufacturing environment</p> <p>2. Understand health and safety aspects relevant to the food or beverage manufacturing environment</p> <p>3. Know how to clean, sanitise/sterilise food manufacturing equipment and surfaces manually</p>	<p>Gr 5 : 1st year</p> <ul style="list-style-type: none"> • Visit a food or beverage manufacturing environment to explain procedures/health and safety aspects • Demonstrate how to clean, sanitise/sterilise equipment • Explain how to determine the quality of food products using sensory evaluation <p>Gr 5 : 2nd year</p> <ul style="list-style-type: none"> • Visit a food or beverage manufacturing environment to explain procedures/health and safety aspects • Demonstrate how to clean, sanitise/sterilise equipment while learners assist • Determine the quality of food products using sensory evaluation

Grade 5 Term 4

WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		4. Sterilise bottles/containers 5. Determine the quality of food products using sensory evaluation <u>Sustain all agricultural practices needing continuous maintenance</u>	comparing appropriate food to spoilt food products <ul style="list-style-type: none"> Demonstrate how to prepare a product for the market, i.e., jam, chutney, etc and bottle produce explaining the above processes practically
			<i>Gr 5: 3rd year</i> <ul style="list-style-type: none"> Visit a food or beverage manufacturing environment to explain procedures/health and safety aspects Demonstrate how to clean, sanitise/sterilise equipment while learners assist Determine the quality of food products using sensory evaluation comparing appropriate food to spoilt food products Demonstrate how to prepare a product for the market, i.e., jam, chutney, etc and bottle produce explaining the above processes practically
4	Gardening/Horticulture	<u>Manipulate plants using pre-determined methods and techniques</u> 1. Use the correct procedures of manipulating plants 2. Prepare pruning equipment according to workplace procedures 3. Apply the correct methods of pruning hedges,	<i>Gr 5: 1st year</i> <ul style="list-style-type: none"> Invite a horticulturist or pruner or visit a farm during pruning seasons to give a demonstration on the correct pruning methods for the different plants Demonstrate to learners on how to prepare pruning equipment while learners assist Explain to learners reasons for treating wounds on trees/shrubs while demonstrating the method Remove pruning material and waste whilst explaining to learners

Grade 5 Term 4

WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>trees and ornamental plants</p> <p>4. Treat pruned wounds according to workplace procedures</p> <p>5. Explain reason for treating of wounds of trees (fruit trees) and shrubs (roses)</p> <p>6. Understand why it is important to remove pruning material and waste from garden according to workplace</p> <p>7. Solve common problems associated with pruning within scope of work</p> <p>8. Design a frame to manipulate the shape of a shrub</p> <p>9. Clean and store pruning equipment and protective clothing according to workplace procedures</p> <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<ul style="list-style-type: none"> Clean and store pruning equipment and protective clothing according to workplace procedures <p><i>Gr 5 : 2nd year</i></p> <ul style="list-style-type: none"> Invite a horticulturist or pruner or visit a farm during pruning seasons to give a demonstration on the correct pruning methods for the different plants Assist with pruning and explain on how to prepare pruning equipment Explain reasons for treating wounds on trees/shrubs and assist while teacher demonstrate the method Remove pruning material and waste whilst explaining to learners Describe whilst showing learner pictures the different ways of manipulating plants through frames and pruning Design a frame explaining to learners the important features of such a frame Clean and store pruning equipment and protective clothing according to workplace procedures <p><i>Gr 5 : 3rd year</i></p> <ul style="list-style-type: none"> Invite a horticulturist or pruner or visit a farm during pruning seasons to give a demonstration on the correct pruning methods for the different plants Prepare pruning equipment whilst teacher observe Prune and explain reasons for treating wounds on trees/shrubs and treat wounds under strict supervision

Grade 5 Term 4

WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> Remove pruning material and waste whilst explaining to learners Describe and demonstrate the different ways of manipulating plants through frames and pruning Design own frames on the instruction of the teacher Clean and store pruning equipment and protective clothing according to workplace procedures
5	Animal Production	<p><u>Harvesting and processing of animal products</u></p> <ol style="list-style-type: none"> Describe the animal products used by man i.e. milk, manure, eggs Describe various procedures of harvesting different animal products Prepare equipment for milking and shearing animals Milk cows and goats, and shear farm animals Collect, grade, sort and handle eggs Store and transport animal products <p><u>Demonstrate an understanding of preparing animals for slaughtering and observe the processing of products from slaughtered farm</u></p>	<ul style="list-style-type: none"> Gr 5 : 1st year Make use of a poster for description of which animal products come from which animals Visit farm to observe different procedures of harvesting products, i.e. a dairy farm to observe milking of cows or shearing of sheep Explain preparation of equipment for milking or shearing animals Practically engage in harvesting eggs or milking a cow whilst visiting a dairy farm Demonstrate the shearing of a sheep After collecting eggs, explain to learners how to handle, sort/grade and package eggs Make use of a roster for taking turns to harvest schools own products on a regular basis whilst making sure that process complies with health standards -Explain the importance of the pre-slaughter health status and the economical age of slaughtering

Grade 5 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<u>animals</u> 1. Explain the importance of the pre-slaughter health status 2. Explain the economical age for slaughtering 3. Observe the need for strict health and hygiene with handling products 4. Explain the equipment used in a butchery 5. Explain reasons for various methods of storage of slaughtered animals 6. Explain how different parts of an animal (lamb, beef, pork, chicken, fish, etc.) is cut and processed into different products for consumption such as mince, chops, steaks, fillets, wings, thighs, biltong, etc. <u>Sustain all agricultural practices needing continuous maintenance</u>	<ul style="list-style-type: none"> • Visit a farm where animals are ready to be sent to an abattoir • Visit a butchery to observe and explain to learners the different equipment used in the butchery • Learners practically clean and pack meat of an animal for freezing purposes <hr/> <ul style="list-style-type: none"> • Make use of a poster for description of which animal products come from which animals • Learners complete a worksheet connecting products to the correct animals • Visit farm to observe different procedures of harvesting products, i.e. a dairy farm to observe milking of cows or shearing of sheep • Learners assist in preparation of equipment for milking or shearing animals • Practically engage in harvesting eggs or milking a cow whilst visiting a dairy farm • Demonstrate the shearing of a sheep while learners assist • After collecting eggs, explain to learners how to handle, sort/grade and package eggs • Make use of a roster for taking turns to harvest schools own products on a regular basis whilst making sure that process complies with health standards

Grade 5 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> • Explain the importance of the pre-slaughter health status and the economical age of slaughtering • Visit a farm where animals are ready to be sent to an abattoir • Visit a butchery to observe and explain to learners the different equipment used in the butchery <p>Learners practically clean and pack meat of an animal for freezing purposes</p>
			<p><i>Gr 5: 3rd year</i></p> <ul style="list-style-type: none"> • Make use of a poster for description of which animal products come from which animals • Learners complete a worksheet connecting products to the correct animals • Visit farm to observe different procedures of harvesting products, i.e. a dairy farm to observe milking of cows or shearing of sheep • Learners assist in preparation of equipment for milking or shearing animals • Practically engage in harvesting eggs or milking a cow whilst visiting a dairy farm • Demonstrate the shearing of a sheep while learners assist • After collecting eggs, explain to learners how to handle, sort/grade and package eggs • Make use of a roster for taking turns to harvest schools own products on a regular basis whilst making sure that process complies with health

Grade 5 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<p>standards</p> <ul style="list-style-type: none"> Explain the importance of the pre-slaughter health status and the economical age of slaughtering Visit a farm where animals are ready to be sent to an abattoir Visit a butchery to observe and explain to learners the different equipment used in the butchery Learners practically clean and pack meat of an animal for freezing purposes
6	<u>Environmental Practices</u>	<u>Resource Use: Indigenous knowledge about water harvesting</u> 1. Describe Nguni water collection practices; sweet water 2. Practise how to carry water home 3. Understand scarcity of water <u>Sustain all agricultural practices needing continuous maintenance</u>	<p><i>Gr 5 : 1st year</i></p> <ul style="list-style-type: none"> Discuss availability of water in area where learners live Describe traditional ways of harvesting water from a river using visual material(dvd or youtube) List different ways of preserving water
			<p><i>Gr 5 : 2nd year</i></p> <ul style="list-style-type: none"> Discuss availability of water in area where learners live, encourage learners to bring visual examples Learners explain traditional ways of harvesting water from a river using visual material(dvd or youtube) Discuss different ways of carrying and storing water in the past and now List different ways of preserving water on a farm
			<p><i>Gr 5 : 3rd year</i></p>

Grade 5 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> • Discuss availability of water in area where learners live, encourage learners to bring visual examples • Learners explain traditional ways of harvesting water from a river using visual material(dvd or youtube) • Discuss different ways of carrying and storing water in the past and now • Make a pot from clay in which water can be kept
7	Business Practices	<u>Apply basic skills in storage management and stocktaking</u> <ol style="list-style-type: none"> 1. Prepare storage space to receive stock through cleaning and disinfecting 2. Identify appropriate space for storage of different products and equipment 3. Understand the prevention of contamination 4. Apply basic stock inventory taking, issuing and receiving of stock 5. Identify the appropriate re-order level and reporting on stock levels for prompt re-ordering <u>Understand basic costing (income/expenditure)</u>	<p><i>Gr 5 : 1st year</i></p> <ul style="list-style-type: none"> • Organise storage space to ensure easy access to equipment needed, call teacher when completed so that teacher can do a check • After harvesting of produce, learners make a list of all products roughly on an empty page, transfer the list to a more formal worksheet or to a simple spreadsheet on the computer • Discuss/compare quality of products with products available in retail and price produce • Pack produces in appropriate way and display produce correctly, teacher do quality check • Draw up a basic budget reflecting expenditure and income • Use simple spreadsheet/journal to implement the concept by following the teachers instructions <p><i>Gr 5 : 2nd year</i></p> <ul style="list-style-type: none"> • Organise storage space to ensure easy access to equipment needed,

Grade 5 Term 4

WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		<p>1. Demonstrate how to draw up a basic budget reflecting expenditure and income</p> <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p>call teacher when completed so that teacher can do a check</p> <ul style="list-style-type: none"> • After harvesting of produce, learners make a list of all products roughly on an empty page, transfer the list to a more formal worksheet or to a simple spreadsheet on the computer • Discuss/compare quality of products with products available in retail and price produce • Pack produces in appropriate way and display produce correctly, teacher do quality check • Draw up a basic budget reflecting expenditure and income • Use simple spreadsheet/journal to implement the concept by following the teachers instructions <hr/> <p><i>Gr 5 : 3^d year</i></p> <ul style="list-style-type: none"> • Organise storage space to ensure easy access to equipment needed, call teacher when completed so that teacher can do a check • After harvesting of produce, learners make a list of all products roughly on an empty page, transfer the list to a more formal worksheet or to a simple spreadsheet on the computer • Discuss/compare quality of products with products available in retail and price produce • Pack produces in appropriate way and display produce correctly, teacher do quality check • Draw up a basic budget reflecting expenditure and income

Grade 5 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> Use simple spreadsheet/journal to implement the concept by following the teachers instructions
8	Business Practices	<p><u>Understand entrepreneurship in agriculture</u></p> <ol style="list-style-type: none"> List opportunities, outlets and basic requirements of local markets Understand the differences in quality of products and be aware of local preferences Compare prices of various outlet to price a products Understand the importance of packaging and display of products Set up and man a stall at an outlet in the immediate community <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	<p><i>Gr 5 : 1st year</i></p> <ul style="list-style-type: none"> Make use of produce to practically discuss and compare the quality of products deciding which produce is sub-standard and which is appropriate to be marketed Have products and pricelist from an outlet in the community available to discuss pricing of a product. Make learners aware of the cost of expenses in the process of cultivating product Discuss the importance of packaging using samples from the industry Point out what materials are available through implementing recycling to reduce cost Learners practise marketing skills at school and in the community Learners set up a stall at school for teachers, parents and community to support by buying their produce <p><i>Gr 5 : 2nd year</i></p> <ul style="list-style-type: none"> Make use of produce to practically discuss and compare the quality of products deciding which produce is sub-standard and which is appropriate to be marketed Have products and pricelist from an outlet in the community available to discuss pricing of a product. Make learners aware of the cost of expenses in the process of cultivating product Discuss the importance of packaging using samples from the industry

Grade 5 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
			<ul style="list-style-type: none"> Point out what materials are available through implementing recycling to reduce cost Learners practise marketing skills at school and in the community Learners set up a stall at school for teachers, parents and community to support by buying their produce
			<p><i>Gr 5 : 3rd year</i></p> <ul style="list-style-type: none"> Make use of produce to practically discuss and compare the quality of products deciding which produce is sub-standard and which is appropriate to be marketed Have products and pricelist from an outlet in the community available to discuss pricing of a product. Make learners aware of the cost of expenses in the process of cultivating product Discuss the importance of packaging using samples from the industry Point out what materials are available through implementing recycling to reduce cost Learners practise marketing skills at school and in the community Learners set up a stall at school for teachers, parents and community to support by buying their produce
9		<u>Revise and sustain activities taught in previous weeks and agricultural practices needing continuous maintenance</u> 1. Recognise different insects	<p><i>Gr 5 : 1st year</i></p> <ul style="list-style-type: none"> Select appropriate tools for harvesting Clean and sanitise equipment for preservation Prepare pruning equipment Identify different equipment used in a butchery

Grade 5 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
		2. Correct handling of crop/fruit 3. Crop preservation 4. Manipulating/pruning plants 5. Processing of products in a butchery 6. Indigenous knowledge on water harvesting 7. Understand basic costing 8. Set up and man a stall	<ul style="list-style-type: none"> Describe traditional ways of harvesting water Use simple spreadsheet/journal to record basic income and expenditure Set up stall and practice marketing skills at school
			<i>Gr 5 : 2nd year</i> <ul style="list-style-type: none"> Select and demonstrate correct methods of harvesting Prepare a preserved product for market Explain reasons for treating wound on trees/shrubs Clean and pack meat for freezing purposes Demonstrate different ways of carrying water Draw up a basic budget Set up stall and practice marketing skills in community
			<i>Gr 5 : 3^d year</i> <ul style="list-style-type: none"> Practical harvesting of crops Prepare a preserved product for market Remove pruning material correctly Clean and pack meat for freezing purposes Explain availability of water in area Draw up a basic budget and use simple spreadsheet/journal to record income and expenditure Set up stall and practice marketing skills in community

Grade 5 Term 4			
WEEK	TOPIC	CONTENT <i>The learner must be able to</i>	Techniques, activities, resources and process notes
10	Assessment	<p>The week allocated to formal assessment should be integrated across the nine (9) weeks planned for teaching and learning. The assessment will consist of practical tasks with 80% weighting and informal theoretical assessment with 20% weighting.</p> <p><u>Sustain all agricultural practices needing continuous maintenance</u></p>	

Assessment

Assessment is formally recorded during four (4) practical sessions with a minimum of four (4) skills reported. Learners, regardless of abilities, shall be assessed on the same skill. The following serves as suggestion of skills to record and report on.

	<i>Gr 5 : 1st year</i>	<i>Gr 5 : 2nd year</i>	<i>Gr 5 : 3rd year</i>
Week 2	Select appropriate tools for harvesting	Select correct methods of harvesting	Practical harvesting of crops
Week 3	Clean and sanitise equipment for preservation	Prepare preserved product for market	Prepare preserved product for market
Week 4	Prepare pruning equipment	Reasons for treating wound on trees/shrubs	Remove pruning material correctly
Week 5	Identify different equipment used in a butchery	Clean/pack meat for freezing purposes	Clean/pack meat for freezing purposes
Week 6	Describe traditional ways of harvesting water	Demonstrate different ways of carrying water	Explain availability of water in area
Week 7	Use simple spreadsheet/journal to record	Draw up a basic budget	Draw up a basic budget and record income and expenditure
Week 8	Set up stall, practice marketing skills at school	Set up stall/practice marketing in community	Set up stall/practice marketing in community

Four theoretical activities are assessed and recorded, however, a minimum of 1 theoretical activity is reported on. The following serves as suggestions of theoretical activities to report on.

Week 1	Produce chart with examples of insects	List insects as harmful/eco-friendly on worksheet	Circle harmful insects on a worksheet
Week 5	Match pictures of products to animals	Label and match products and animals	Connect products to correct animals

4 SECTION 4

5 ASSESSMENT

The generic assessment section will be copied after the public comment changes have been made.

The following section is subject specific.

Assessment across the 5 years

Grade 4 – Practical assessment tasks

		Gr 4 : 1 st year	Gr 4 : 2 nd year
Task	Term 1		
1	Week 2 or 3	Use basic hand tools – spade & fork Identify parts of plants	Use basic hand tools – spade, fork & rake Identify parts of plants
2	Week 4 or 5	Dress in protective clothing Identify and assist with feeding of smaller farm animals	Dress in protective clothing Feed smaller farm animals
3	Week 6 or 7	Identify and assist with handling of poultry Assist in applying appropriate bedding material	Feed and care for poultry Apply bedding material on own
4	Week	Name medicinal plants	Harvest medicinal plants
Task	Term 2		
1	Week 2 or 3	Observe and report fencing where maintenance is needed Separate topsoil from subsoil	Assist in practical activities maintaining fencing where needed Name samples of different soil types
2	Week 4 or 5	Dig over bed Place composting material with correct composting process	Prepare bed for permaculture process Dig over composting material in correct way
3	Week 6 or 7	Name different cultivars/crops Prepare area for mowing	Connect cultivars/crops to plant or tree Rake and collect grass after mowing
4	Week	Name different farm animals discussed	Apply bedding materials for animals

			correctly
Task	Term 3		
1	Week 1 or 2	Re-pack worm farm with assistance Water garden	Prepare natural fertilizer Water garden choosing correct equipment
2	Week 3 or 4	Plant seedlings (companion planting) Plant ornamental seedlings with assistance	Plant seedlings (intercropping) Plant ornamental seedlings
3	Week 6 or 7	Prepare permaculture plot with assistance Assist in handle and move animals	Prepare permaculture plot Handle and move animals
4	Week	Tidy storeroom with assistance	Tidy storeroom
Task	Term 4		
1	Week 2 or 3	Label different insects using a chart Use sensory cues to indicate maturity of fruit	Identify which insect have which effect(harmful or eco-friendly) Active participation in processes of harvesting
2	Week 4 or 5	Assist to prune hedge Describe different types of feed with examples	Prune hedge while teacher give advice Assist in selecting suitable feed for specific animals
3	Week 6 or 7	Describe which animal products come from which animals Identify sources of natural/manmade structures for storage of water	Describe which products come from which animals Explain the water cycle
4	Week	Assist in organising storage space	Assist in organising storage space

Grade 4 term 1 – 4: Theoretical assessment tasks

Evidence of one theoretical task of formal assessment between week 2 – 9 as in the annual teaching plan must be available for quality assurance. The following table indicates two assessment tasks from which the teacher may choose one.

		<i>Gr 4 : 1st year</i>	<i>Gr 4 : 2nd year</i>
Task	Term 1		
1	Week 3	Worksheet naming three parts of plants	Worksheet naming different parts of plants
2	Week 5	Label three small breeds of farm animals on a worksheet	Label six small breeds of farm animals on a worksheet
Task	Term 2		
1	Week 2	Tick off creatures found, on worksheet	Label different kinds of soil
2	Week 5	Complete worksheet grouping vegetables and fruit separately	Complete worksheet labelling different crops or fruit cultivars
Task	Term 3		
1	Week 4	Worksheet: match different watering equipment	Worksheet: name different watering equipment
2	Week 6	Worksheet: sequence of process of permaculture planting	Worksheet: sort pictures in sequence of life cycle of soil organisms
Task	Term 4		
1	Week 1	Match and glue weeds next to drawing on worksheet	Name common types of weeds in garden
2	Week 2	Identify and name circle eco-friendly insects	Categorise harmful or eco-friendly insects

Grade 5 – Practical assessment tasks

		Gr 5 : 1 st year	Gr 5 :2 nd year	Gr 5 : 3 rd year
Task	Term 1			
1	Week 2 or 3	List safety practices regarding cleaning materials Discuss what damage predators can cause	Discuss safety practices regarding fertilizer List reasons for fencing	Discuss safety practices: cleaning materials/fertilizers Maintain existing fencing
2	Week 4 or 5	Rake/collect grass not caught by lawn mower Sort equipment needed: veterinary practices	List appropriate use/care/storage of lawn mover Name equipment needed: veterinary practices	Discuss care and storage of weed eater/chainsaw Clean equipment needed for veterinary practices
3	Week 6 or 7	Name wild/leafy vegetables from home/school Tick next to picture the quantity of stock	Propagate wild like leafy/plants like spekboom Take stock on list on worksheet	Discuss dangers of eating wild plants that are unknown Take stock and compare with teacher's list
4	Week 8	Name different outlets available	Match names to different outlets available	Copy names to different outlets available
Task	Term 2			
1	Week 2 or 3	Make different kinds of natural fertilizer Prepare for seed growing	Repack the worm farm Transplant seedlings	Use fluid from worm farm as natural fertilizer Prepare cuttings for new plants
2	Week 4 or 5	Plant ornamental seedlings from seed trays Prepare area where plants or trees are to be transplanted	Apply appropriate watering of seedlings Prepare soil and use procedures before, during and after plants are planted	Apply appropriate watering of seedlings Prepare soil and use procedures before, during and after plants are planted
3	Week 6 or 7	Identify and name different structures used for	Discuss the importance and reasons used for shelter/housing	Assist in building simple structure for i.e. chickens

		shelter/housing Describe the different types of soil degradation	Explain the causes of soil degradation	Set up an experiment on soil erosion
4	Week 8	Explain the importance of appropriate packaging	Practically pack produce	Display packed produce in appropriate way
Task	Term 3			
1	Week 2 or 3	Name different forms of irrigation Weed plot in garden with appropriate method	Explain irrigation system suitable Explain safety precautions for chemical weeding	Irrigate crop correctly at appropriate time of day Assist in chemical weeding where needed
2	Week 4 or 5	Use correct tools for process of planting Prepare plot for permaculture planting	Execute the process of sowing seeds or planting seedlings Explain advantages of permaculture	Choose suitable planting method Plants seedlings using permaculture principles
3	Week 6 or 7	Label different types of feed List and name natural disasters	Select feed types/quantity for specific animals Explain the effects of natural disaster	Report feed levels and irregularities Explain safety measures during a disaster
4	Week 8	Compare the quality of products	Explain expenses in the process of cultivating products	List expenses in process of cultivating a product
Task	Term 4			
1	Week 2 or 3	Select appropriate tools for harvesting Clean and sanitise equipment for preservation	Select correct methods of harvesting Prepare preserved product for market	Practical harvesting of crops Prepare preserved product for market
2	Week 4 or 5	Prepare pruning equipment Identify different equipment used in a butchery	Reasons for treating wound on trees/shrubs Clean/pack meat for freezing purposes	Remove pruning material correctly Clean/pack meat for freezing purposes
3	Week	Describe traditional ways	Demonstrate different	Explain availability of

	6 or 7	of harvesting water Use simple spreadsheet/journal to record	ways of carrying water Draw up a basic budget	water in area Draw up a basic budget and record income and expenditure
4	Week 8	Set up stall, practice marketing skills at school	Set up stall/practice marketing in community	Set up stall/practice marketing in community

Evidence of one theoretical task of formal assessment between week 2 – 9 as in the annual teaching plan must be available for quality assurance. The following table indicates two assessment tasks from which the teacher may choose one.

Grade 5 term 1 – 4: Theoretical assessment tasks

		<i>Gr 5 : 1st year</i>	<i>Gr 5 :2nd year</i>	<i>Gr 5 : 3rd year</i>
Task	Term 1			
1	Week 3	Match veterinary equipment on worksheet	Match picture/names of veterinary equipment	Copy names of veterinary equipment to pictures
2	Week 7	Practise to take stock by ticking next to picture	Take stock on list of names/pictures on worksheet	Take stock
Task	Term 2			
1	Week 6	Link animals to appropriate shelter/housing structures on a worksheet	Link animals and their names to appropriate shelter/housing structure on a worksheet	Measure the material needed to build a shelter/structure scaled down on a worksheet
2	Week 8	Complete simple spreadsheet/journal to explain a basic budget reflecting expenditure and income using a completed worksheet as reference	Complete simple spreadsheet/journal to explain a basic budget reflecting expenditure and income	Draw up simple spreadsheet/journal to explain a basic budget reflecting expenditure and income
Task	Term 3			
1	Week 7	Sort pictures in categories on worksheet	Glue names of disaster under picture	Find and describe correct pictures to each disaster
2	Week 8	List products with	Transfer list to	Transfer list to

		pictures/drawings, etc	worksheet from sample	worksheet/spreadsheet
Task	Term 4			
1	Week 1	Produce chart with examples of insects	List insects as harmful/eco-friendly on worksheet	Circle harmful insects on a worksheet
2	Week 5	Match pictures of products to animals	Label and match products and animals	Connect products to correct animals

RESOURCES:

Books: Setting up and running a school garden. A manual for teachers, parents and communities. Food An Agriculture Organization of the United Nation Rome, 2005 ISBN 978-92-5-105408-6

Creative Garden design. A Share-Net Resource Book. Share-Net. 2009 ISBN 978-1-919991-57-3

Worming Waste. A Share-Net Resource Book. Share-Net. 2009 ISBN 978-1-919991-01-6

HANDS-ON Soil and Compost Life. Windows on the Wild. A FIELD GUIDE. A Share-Net Resource Book. Share-Net. 2006 ISBN 0-9583197-8-2

AFRICA OUR HOME. Sasha Norris. Iceberg Marketing Pic. Siren Conservation Education and Tusk Trust. ISBN 978-0-9555682

ECOLOGY An introduction to principles. Pat Irwin.2001. Rhodes University Printing Unit. ISBN 0-86810-373-X

AFRICAN HERITAGE KNOWLEDGE IN THE CONTEXT OF SOCIAL INNOVATION. Learning contributions of the regional centres of expertise on education for sustainable development. Editors: Rob O'Donoghue, Soul Shava, Cryton Zazu, United Nations University, UNU-IAS ISBN 978-1-56581-231-4

Websites:

www.handsforchange.or

PUBLIC COMMENT