

MINISTRY OF PRIMARY AND SECONDARY EDUCATION

AGRICULTURE

JUNIOR (GRADE 3-7) SYLLABUS

(2015 - 2022)

**Curriculum Development and Technical Services,
P.O. Box MP 133, Mount Pleasant, Harare**

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1.0 PREAMBLE

1.1 Introduction

Junior School Agriculture is a science learning area that involves theory and practical activities in soil, water, plant and animal management, farm tools and machinery use as well as Agri-business. This five year learning phase (Grade 3-7) will provide learners with opportunities to identify, investigate, solve problems, carry out agricultural activities and assess their viability in a sustainable manner. The learning phase will see learners being assessed through continuous assessment and summative examination.

1.2 Rationale

Zimbabwe's economy is agro based, therefore it is imperative that learners in their diversity acquire necessary agricultural knowledge, skills and positive attitudes at grass root level. This would enable learners to be proactive, fit well in the community and national economy, value the dignity of labour and harness available opportunities for enterprise.

1.3 Summary of Content

The Junior School Agriculture Syllabus will cover theory and practical activities in areas such as soil, water, plant and animal management, farm tools and machinery and Agri-business. This five year learning phase seeks to develop skills in sustainable soil and water management as well as production and maintenance of agricultural produce. The syllabus will help learners to acquire marketing and value addition skills.

1.4 Assumptions

It is assumed that learners know:

- various plants and animals
- how to conduct practical activities such as weeding, digging and watering
- how to use basic tools such as hoes, slashers and wheelbarrows

- that buying and selling of agricultural produce take place
- that resources such as land, tools and equipment are available for use

1.5 Cross-Cutting Themes

This phase will develop in learners, an appreciation of:

- Safety
- Health issues
- Food security
- Technology
- Environmental issues
- Disaster risk management
- Financial literacy
- Heritage

2.0 PRESENTATION OF SYLLABUS

The Junior Agriculture Syllabus is a single document covering grades 3 to 7. It contains the preamble, aims, assessment, syllabus topics, scope and sequence. The syllabus also contains content matrix for all junior grades. The scope and sequence chart shows progression of topics from grade 3 to 7, while the syllabus matrix gives details of the content to be covered. The syllabus also suggests a list of resources to be used during learning and teaching.

3.0 AIMS

The syllabus aims to help learners to:

- appreciate the importance of agriculture to the individual, family, community and country

- develop a positive attitude towards Agriculture and its study as a science
- develop environmental awareness and actively participate in conservation projects within the school and in their community
- acquire and use scientific knowledge in managing agricultural activities sustainably
- develop agricultural business skills in running agriculture as an enterprise
- develop innovativeness in agricultural practices including value addition
- contribute to the improvement of community nutritional needs, food security and socio-economic development of the country

4.0 SYLLABUS OBJECTIVES

By the end of this learning phase learners should be able to:

- relate the importance of agriculture to socio-economic development of the family, community and country
- use scientific principles, skills and sustainable agricultural practices to solve agricultural challenges in their communities
- apply indigenous knowledge, scientific principles and new technology to improve agricultural production
- relate the environment and climatic conditions to agricultural activities
- choose appropriate equipment, materials and methods for a specific process and use them safely
- use local materials and knowledge to design agricultural tools
- apply agricultural principles to improve their livelihoods
- record and evaluate given agricultural activities
- identify markets and sell their produce profitably

5.0 METHODOLOGY AND TIME ALLOCATION

Methodology

Learner centred and hands on approaches should be used in the development of concepts and skills. These approaches encourage curiosity and promote practical orientated learning whereby learners apply their experiences, knowledge, skills and attitudes independently. Linkage between theory and practice is strongly recommended in the teaching of agriculture. The following are suggested methods of teaching and learning agriculture:

- Project based learning
- Educational tours
- E-learning
- Experimentation
- Problem solving
- Discovery method
- Collections
- Demonstrations
- Debate
- Discussions
- Design based learning
- Dramatization
- Case studies
- Gallery walk
- Resource person(s)
- Simulations
- Role Play
- Song and Dance
- Survey

NB. The above suggested methods should be enhanced by the application of orthodidactic principles and multi-sensory approaches to teaching. These include tactility, concreteness, individualisation, self-activity, totality and wholeness. Teachers are encouraged to address the learners' residual senses

Time Allocation

Eight periods of thirty minutes per week, with two double lessons for practical, should be allocated for adequate coverage of the syllabus.

6.0 TOPICS

6.1 Introduction to agriculture

6.2 Climate and land use

6.3 Soil

6.4 Water

6.5 Plants

6.6 Animals

6.7 Farm implements and machinery

6.8 Agri-business



6.0 SCOPE AND SEQUENCE

6.1 TOPIC 1: INTRODUCTION TO AGRICULTURE

TOPIC	GRADE 3	GRADE 4	GRADE 5	GRADE 6	GRADE 7
Importance of Agriculture	<ul style="list-style-type: none"> • Definition of agriculture • Importance of agriculture 	<ul style="list-style-type: none"> • Importance of agriculture to the family 	<ul style="list-style-type: none"> • Importance of agriculture to the community and nation 	<ul style="list-style-type: none"> • Branches of agriculture: <ul style="list-style-type: none"> - Crop production - Animal production - Soil science - Agricultural engineering - Agricultural economics - Horticulture - Forestry and Wildlife 	<ul style="list-style-type: none"> • Career opportunities in agriculture • Types of agriculture in Zimbabwe: <ul style="list-style-type: none"> - Mixed farming - Specialised farming - Diversified farming • Farming systems: <ul style="list-style-type: none"> Shifting Subsistence - Commercial • Irrigation farming in Zimbabwe • Land reform
Farm tools	<ul style="list-style-type: none"> • Garden tools and their uses • Models of garden tools • Safe use of garden tools 	<ul style="list-style-type: none"> • Farm tools and their uses • Designs of garden tools • Common hazards in agriculture 	<ul style="list-style-type: none"> • Classification of farm tools • Safe use of farm tools and implements 	<ul style="list-style-type: none"> • Maintenance of farm tools • Storage facilities • Model of a tool rack • Safe use of agro-chemicals 	<ul style="list-style-type: none"> • Design and Construction of tool racks • Safe storage and disposal of agro chemicals
Safety in agriculture					

6.2 TOPIC 2: CLIMATE AND LAND USE

TOPIC	GRADE 3	GRADE 4	GRADE 5	GRADE 6	GRADE 7
Climate	<ul style="list-style-type: none"> Seasons of Zimbabwe 	<ul style="list-style-type: none"> Seasons of Zimbabwe and related agricultural activities 	<ul style="list-style-type: none"> Weather Influence of weather on agricultural activities 	<ul style="list-style-type: none"> Climate Natural farming regions in Zimbabwe 	<ul style="list-style-type: none"> Agriculture and climate change Characteristics of natural farming regions in Zimbabwe Agricultural activities in each natural farming region in Zimbabwe

6.3 TOPIC 3: SOIL

TOPIC	GRADE 3	GRADE 4	GRADE 5	GRADE 6	GRADE 7
Soil composition		<ul style="list-style-type: none"> Soil components 	<ul style="list-style-type: none"> Percentages of soil components 	<ul style="list-style-type: none"> Functions of: <ul style="list-style-type: none"> soil mineral matter soil water soil air soil organic matter 	<ul style="list-style-type: none"> Importance of living organisms in the soil
Soil formation	<ul style="list-style-type: none"> Rocks break 	<ul style="list-style-type: none"> Rocks break to form soil 	<ul style="list-style-type: none"> Different rocks break to form different types soils 	<ul style="list-style-type: none"> Weathering <ul style="list-style-type: none"> Weathering agents 	<ul style="list-style-type: none"> Types of weathering: <ul style="list-style-type: none"> physical biological chemical
Soil types	<ul style="list-style-type: none"> Local soils 	<ul style="list-style-type: none"> Soil types: <ul style="list-style-type: none"> clay loam sand 	<ul style="list-style-type: none"> Soil particle sizes 	<ul style="list-style-type: none"> Properties of soil 	<ul style="list-style-type: none"> Soil texture and soil structure

TOPIC	GRADE 3	GRADE 4	GRADE 5	GRADE 6	GRADE 7
Soil profile					<ul style="list-style-type: none"> • Layers of the soil profile <ul style="list-style-type: none"> - Top soil - sub soil - Gravel - Parent rock • Characteristics of each layer
Soil fertility	<ul style="list-style-type: none"> • Compost making 	<ul style="list-style-type: none"> • Soil fertility 	<ul style="list-style-type: none"> • Soil nutrients <ul style="list-style-type: none"> - nitrogen (N) - phosphorous(P) - potassium(K) • Types of fertilisers <ul style="list-style-type: none"> - organic and inorganic 	<ul style="list-style-type: none"> • Sources of organic fertilisers • Liquid manure <ul style="list-style-type: none"> - materials - preparation - management 	<ul style="list-style-type: none"> • Management of soil fertility
Soil erosion	<ul style="list-style-type: none"> • Soil erosion 	<ul style="list-style-type: none"> • Causes of soil erosion 	<ul style="list-style-type: none"> • Agents of soil erosion: <ul style="list-style-type: none"> - running water - wind - animals • types of soil erosion 	<ul style="list-style-type: none"> • Effects of soil erosion 	<ul style="list-style-type: none"> • Soil conservation
Soil pollution				<ul style="list-style-type: none"> • Soil pollution • Sources of soil pollution • Effects of soil pollution 	<ul style="list-style-type: none"> • Control of soil pollution

6.4 TOPIC 4: WATER

	<ul style="list-style-type: none"> • Uses of water 	<ul style="list-style-type: none"> • Importance of water • Sources of water 	<ul style="list-style-type: none"> • Water harvesting • Water storage • Methods of conserving water 	<ul style="list-style-type: none"> • Soil moisture conservation methods • Water pollution • Causes and effects of water pollution 	<ul style="list-style-type: none"> • Water cycle • Measures to control water pollution
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6.5 TOPIC 5: PLANTS

	<ul style="list-style-type: none"> • Plants within the local environment 	<ul style="list-style-type: none"> • Uses of plants: -cultivated and wild plants 	<ul style="list-style-type: none"> • Classification of plants and types of plants 	<ul style="list-style-type: none"> • Plant parts: <ul style="list-style-type: none"> - leaf - stem - flowers - roots • Importance of major plant nutrients NPK • Importance of minor plant nutrients <ul style="list-style-type: none"> -boron -sulphur -zinc 	<ul style="list-style-type: none"> • Functions of plant parts • Nutrients deficiency symptoms: <ul style="list-style-type: none"> lack of <ul style="list-style-type: none"> -nitrogen(N) -phosphorous(P) -potassium (K)
	<ul style="list-style-type: none"> • Local organic sources of plant nutrients 	<ul style="list-style-type: none"> • Inorganic sources of plant nutrients 	<ul style="list-style-type: none"> • Major plant nutrients • Minor plant nutrients <ul style="list-style-type: none"> -boron -sulphur -zinc 		

TOPIC	GRADE 3	GRADE 4	GRADE 5	GRADE 6	GRADE 7
Vegetable crops	<ul style="list-style-type: none"> Local vegetables 	<ul style="list-style-type: none"> Classes of vegetable crops Growing leaf vegetables Marketing of vegetables 	<ul style="list-style-type: none"> Nutritional value of vegetables Growing root vegetables Marketing of vegetables 	<ul style="list-style-type: none"> Growing fruit and legume vegetables vegetable diseases and pests marketing of vegetables 	<ul style="list-style-type: none"> Vegetable crop rotation processing and marketing of vegetable crops
Field crops	<ul style="list-style-type: none"> Local field crops 	<ul style="list-style-type: none"> Types of field crops 	<ul style="list-style-type: none"> Value of field crops Growing a field legume crop 	<ul style="list-style-type: none"> Growing of cereal crops Diseases and pests of the cereal crops 	<ul style="list-style-type: none"> Field crops rotation Care and harvesting of a cereal crop processing and marketing of field crops
Orchard/fruit trees	<ul style="list-style-type: none"> Local fruit trees 	<ul style="list-style-type: none"> Importance of fruit trees Indigenous and exotic fruit trees 	<ul style="list-style-type: none"> Establishing a nursery Marketing of fruit tree seedlings 	<ul style="list-style-type: none"> Orchard site Site preparation and planting 	<ul style="list-style-type: none"> Management of fruit trees Processing and marketing of fruits
Ornamental horticulture	<ul style="list-style-type: none"> Ornamental plants 	<ul style="list-style-type: none"> Importance of ornamental plants 	<ul style="list-style-type: none"> Establishment of flower beds Marketing of flowers 	<ul style="list-style-type: none"> Establishment of lawns Marketing of lawns 	<ul style="list-style-type: none"> Establishment of decorative shrubs Marketing of decorative shrubs
Forestry	<ul style="list-style-type: none"> Uses of trees 	<ul style="list-style-type: none"> Importance of trees Indigenous and exotic trees 	<ul style="list-style-type: none"> Management of a nursery Marketing of nursery products 	<ul style="list-style-type: none"> Woodlot sites Land preparation Planting trees 	<ul style="list-style-type: none"> Care and management of trees Afforestation and deforestation
Plant protection		<ul style="list-style-type: none"> Causes of plant damage 	<ul style="list-style-type: none"> Effects of animals, drought and veld fires on crops Methods of controlling crop damage 	<ul style="list-style-type: none"> Pests and weeds effects of pests and weeds Control of pests and weeds 	<ul style="list-style-type: none"> Causes of plant diseases Control of diseases

6.6 TOPIC 6: ANIMALS

TOPIC	GRADE 3	GRADE 4	GRADE 5	GRADE 6	GRADE 7
Introduction to animal study	<ul style="list-style-type: none"> • Uses of domestic animals 	<ul style="list-style-type: none"> • Types of animals: -domestic and wild animals 	<ul style="list-style-type: none"> • Uses of animals in agriculture: - wild and domesticated 	<ul style="list-style-type: none"> • Poultry or rabbit products and by products • Poultry or rabbit housing 	<ul style="list-style-type: none"> • Care of animals • Animal management systems
Animal nutrition	<ul style="list-style-type: none"> • Animal feeds 	<ul style="list-style-type: none"> • Essential nutrients for normal animal growth 	<ul style="list-style-type: none"> • Sources of essential nutrients 	<ul style="list-style-type: none"> • Balanced diet • Functions of essential nutrients 	<ul style="list-style-type: none"> • Nutrient deficiency symptoms and correction
Small livestock production (poultry or rabbits)	<ul style="list-style-type: none"> • Types of small livestock e.g. poultry or rabbits 	<ul style="list-style-type: none"> • Importance of small livestock 	<ul style="list-style-type: none"> • Rearing small livestock: -housing systems and requirements -feeding and caring 	<ul style="list-style-type: none"> • Control of parasites and diseases of small livestock: poultry or rabbits 	<ul style="list-style-type: none"> • marketing of: -poultry or rabbits -products and by products of poultry or rabbits
Apiculture	<ul style="list-style-type: none"> • Characteristics of bees 	<ul style="list-style-type: none"> • Importance of bee keeping • Bee colony 	<ul style="list-style-type: none"> • Types of bee hives 	<ul style="list-style-type: none"> • Construction of bee hives 	<ul style="list-style-type: none"> • Management of bees • Processing and marketing of honey and by products

6.7 TOPIC 7: FARM IMPLEMENTS AND MACHINERY

TOPIC	GRADE 3	GRADE 4	GRADE 5	GRADE 6	GRADE 7
Farm implements and machinery	<ul style="list-style-type: none"> Types of farm implements 	<ul style="list-style-type: none"> Types of farm machinery 	<ul style="list-style-type: none"> Uses of farm implements 	<ul style="list-style-type: none"> Uses of farm machinery Classification of farm machinery 	<ul style="list-style-type: none"> Maintenance and storage of farm implements and machinery Inventory of implements and machinery Design and construction of appropriate technology

6.8 TOPIC 8: AGRI BUSINESS

TOPIC	GRADE 3	GRADE 4	GRADE 5	GRADE 6	GRADE 7
Agri business	<ul style="list-style-type: none"> local agricultural products 	<ul style="list-style-type: none"> local markets and retail markets 	<ul style="list-style-type: none"> Financial records Production records 	<ul style="list-style-type: none"> National markets Income and expenditure 	<ul style="list-style-type: none"> Enterprise budget Profit and loss account

7.0 COMPETANCE MATRIX

7.1 GRADE 3 TOPIC 1: INTRODUCTION TO AGRICULTURE

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Importance of Agriculture	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • • • 	<ul style="list-style-type: none"> • • •
Farm Tools	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • • • • 	<ul style="list-style-type: none"> • • • •
Safety in Agriculture	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • • • •

7.2 GRADE 3 TOPIC 2: CLIMATE AND LAND USE

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Climate	<ul style="list-style-type: none"> • identify the seasons of Zimbabwe • state the months that fall under each season • identify signs from their local environment that indicate seasons 	<ul style="list-style-type: none"> • Seasons of Zimbabwe: <ul style="list-style-type: none"> - Rain season - Post rain season - Cool dry season - Hot dry season 	<ul style="list-style-type: none"> • Naming of the seasons • Classifying months that fall within each season • Discussing local activities and events done in each season • Listing environmental signs (including indigenous knowledge systems) that indicate seasonal changes • Educational tours • Singing songs, reciting rhymes and poems related to seasons 	<ul style="list-style-type: none"> • Seasonal fruits/ crops • Print media • Recommended textbooks • Resource persons

7.3 GRADE 3 TOPIC 3: SOIL

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Soil Types	<ul style="list-style-type: none"> define soil identify local soils 	<ul style="list-style-type: none"> Importance of soil Local soils 	<ul style="list-style-type: none"> Discussing soil and its importance Collecting samples of local soils 	<ul style="list-style-type: none"> Soil samples Recommended textbooks Print media ICT tools
Soil Fertility	<ul style="list-style-type: none"> identify materials used for making compost make a compost 	<ul style="list-style-type: none"> Compost making 	<ul style="list-style-type: none"> Collecting materials used for making compost Pegging the site for a compost Making a compost heap Maintaining the compost heap 	<ul style="list-style-type: none"> Protective clothing Compost making materials such as <ul style="list-style-type: none"> Soil Vegetation and animal matter Water
Soil Erosion	<ul style="list-style-type: none"> define soil erosion identify signs of soil erosion in the local environment 	<ul style="list-style-type: none"> Soil erosion Signs of soil erosion 	<ul style="list-style-type: none"> Discussing soil erosion Educational touring to identify signs of soil erosion in the local environment 	<ul style="list-style-type: none"> Print media ICT tools Local environment

7.4 GRADE 3 TOPIC 4: WATER

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Water Conservation	<ul style="list-style-type: none"> state uses of water in agriculture 	<ul style="list-style-type: none"> Uses of water in agriculture 	<ul style="list-style-type: none"> Listing uses of water in agriculture Demonstrating use of water in agriculture such as irrigating, cleaning garden tools, watering animals 	<ul style="list-style-type: none"> Watering cans Hosepipes Safe water Garden tools Print media Recommended textbooks

7.5 GRADE 3 TOPIC 5: PLANTS

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Introduction to the study of plants	<ul style="list-style-type: none"> identify plants within the local environment 	<ul style="list-style-type: none"> Plants within the local environment 	<ul style="list-style-type: none"> Naming the plants Collecting plant samples Educational touring to identify plants Labelling plants such as trees Project on plants in the local environment 	<ul style="list-style-type: none"> Plants in the local environment ICT tools Resource person(s) such as local elders and Forestry Commission officers Recommended textbooks
Plant nutrition	<ul style="list-style-type: none"> state local organic sources of plant nutrients 	<ul style="list-style-type: none"> Local organic sources of plant nutrients 	<ul style="list-style-type: none"> Stating the locally available organic sources Collecting samples of locally available organic sources 	<ul style="list-style-type: none"> Compost Animal manure Decayed plant matter ICT tools Recommended textbooks
Vegetable crops	<ul style="list-style-type: none"> identify local vegetables classify local vegetables as indigenous or exotic 	<ul style="list-style-type: none"> Local vegetables: <ul style="list-style-type: none"> Indigenous Exotic 	<ul style="list-style-type: none"> Listing of local vegetables Identifying the local vegetables Classifying local vegetables 	<ul style="list-style-type: none"> Local vegetables Print media Recommended textbooks
Field crops	<ul style="list-style-type: none"> identify local field crops 	<ul style="list-style-type: none"> Local field crops 	<ul style="list-style-type: none"> Listing of local field crops Identifying local field crops Educational touring to nearby crop fields 	<ul style="list-style-type: none"> Recommended textbooks Samples of produce of local field crops Local field crops Print media ICT tools

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Orchard/fruit trees	<ul style="list-style-type: none"> identify local fruit trees 	<ul style="list-style-type: none"> Local fruit trees 	<ul style="list-style-type: none"> Listing names of local fruit trees Identifying local fruit trees Educational touring to observe local fruit trees 	<ul style="list-style-type: none"> Recommended textbooks Samples of produce of local fruit trees Local fruit trees Print media ICT tools
Ornamental horticulture	<ul style="list-style-type: none"> define ornamental horticulture identify ornamental plants 	<ul style="list-style-type: none"> Ornamental horticulture Ornamental plants 	<ul style="list-style-type: none"> Describing ornamental horticulture Listing ornamental plants Identifying ornamental plants Watering ornamental plants 	<ul style="list-style-type: none"> ICT tools Ornamental plants Print media Watering cans Resource person such as horticulturalist
Forestry	<ul style="list-style-type: none"> define forestry state uses of trees 	<ul style="list-style-type: none"> Uses of trees 	<ul style="list-style-type: none"> Describing forestry Listing uses of trees Educational touring to observe uses of trees 	<ul style="list-style-type: none"> ICT tools Forestry products Print media Resource person(s) such as local elders

7.6 GRADE 3 TOPIC 6: ANIMALS

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Introduction to animal study	<ul style="list-style-type: none"> list uses of domestic animals 	<ul style="list-style-type: none"> Uses of domestic animals 	<ul style="list-style-type: none"> Naming domestic animals Discussing uses of domestic animals Observing situations where domestic animals are used Drawing domestic animals Modelling domestic animals 	<ul style="list-style-type: none"> Recommended texts Domestic animals ICT tools Print media Products and by-products from domestic animals
Animal nutrition	<ul style="list-style-type: none"> identify types of animal feeds classify the animal feeds as natural and commercial 	<ul style="list-style-type: none"> Animal feeds 	<ul style="list-style-type: none"> Naming animal feeds Grouping the animal feeds as natural and commercial Collecting samples of feeds Feeding animals kept in the school 	<ul style="list-style-type: none"> Recommended texts ICT tools Samples of feeds Animals
Small livestock production (poultry or rabbits)	<ul style="list-style-type: none"> name the types of small livestock 	<ul style="list-style-type: none"> Types of small livestock: <ul style="list-style-type: none"> poultry or rabbits 	<ul style="list-style-type: none"> Listing examples of poultry. Drawing types of poultry or rabbits Modelling poultry or rabbits Educational touring to observe different types of poultry and rabbits 	<ul style="list-style-type: none"> Recommended textbooks Print media ICT tools Poultry or rabbits
Apiculture	<ul style="list-style-type: none"> define apiculture distinguish bees from other insects 	<ul style="list-style-type: none"> Apiculture: <ul style="list-style-type: none"> characteristics of bees 	<ul style="list-style-type: none"> Describing the differences between bees and other insects Drawing the bee 	<ul style="list-style-type: none"> ICT tools Print media Recommended textbooks Bee specimen

7.7 GRADE 3 TOPIC 7: FARM IMPLEMENTS AND MACHINERY

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Farm implements	<ul style="list-style-type: none"> identify farm implements 	<ul style="list-style-type: none"> Types of farm implements 	<ul style="list-style-type: none"> Identifying farm implements Drawing farm implements Educational touring to observe farm implements Keeping an inventory of farm implements 	<ul style="list-style-type: none"> Print media Recommended textbooks ICT tools Farm implements

7.8 GRADE 3 TOPIC 8: AGRIBUSINESS

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Agribusiness	<ul style="list-style-type: none"> list local agricultural products 	<ul style="list-style-type: none"> Local agricultural products 	<ul style="list-style-type: none"> Naming of agricultural products Collecting agricultural products Drawing agricultural products 	<ul style="list-style-type: none"> Samples of agricultural products Recommended textbooks Print media

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<p>5 7 1 5 A 1 9 1 7 F 8 0 - A 8 6 !</p>	<ul style="list-style-type: none"> • ' 8 " () / 3 ! * & C & - 8 6 ! - " % ! " 8 !) , ! & 1 - . 2 % 2 			

8.2 GRADE 4 TOPIC 2: CLIMATE AND LAND USE

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Climate	<ul style="list-style-type: none"> • name the seasons of Zimbabwe • match seasons with their related agricultural activities 	<ul style="list-style-type: none"> • Seasons of Zimbabwe. <ul style="list-style-type: none"> - Main rain season - Post rain season - Cool dry season - Hot dry season • Agricultural activities done in different seasons 	<ul style="list-style-type: none"> • Naming seasons of the year associated with months • Discussing agricultural activities for each season • Drawing a chart of seasons • Singing songs related to seasons of the year. 	<ul style="list-style-type: none"> • Print media • Recommended textbooks • ICT tools

8.3 GRADE 4 TOPIC 3: SOIL

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Soil Composition	<ul style="list-style-type: none"> list four components of soil 	<ul style="list-style-type: none"> Soil components: air, water, organic matter and mineral (inorganic) matter 	<ul style="list-style-type: none"> Collecting samples of soil e.g. in tins Identifying particles in the soil samples Pouring water on soil and watching bubbles being emitted Carrying out an experiment to determine moisture content of the soil sample such as: heating of wet soil 	<ul style="list-style-type: none"> Recommended textbooks Soil samples Water Source of heat Metal tins
Soil Types	<ul style="list-style-type: none"> classify soil according to particle size 	<ul style="list-style-type: none"> Soil types: clay, loam and sand 	<ul style="list-style-type: none"> Collecting samples of soil from different sites where there is clay, loam and sand Comparing the samples Classifying soils 	<ul style="list-style-type: none"> Recommended textbooks Soil samples Print media ICT tools
Soil Fertility	<ul style="list-style-type: none"> define soil fertility list three major soil nutrients 	<ul style="list-style-type: none"> Soil fertility Major soil nutrients: Nitrogen (N) Phosphorous (P) Potassium (K) 	<ul style="list-style-type: none"> Listing characteristics of fertile soil Listing major soil nutrients Collecting samples of different soils Experimenting with different soils to establish soil fertility Naming major nutrients indicated on fertilizer bags 	<ul style="list-style-type: none"> Recommended textbooks Soil samples Fertilizer bags ICT tools Print media
Soil Erosion	<ul style="list-style-type: none"> name causes of soil erosion 	<ul style="list-style-type: none"> Causes of soil erosion: water, wind and animals 	<ul style="list-style-type: none"> Conducting educational tours to observe eroded areas Discussing causes of the erosion 	<ul style="list-style-type: none"> Recommended textbooks Print media ICT tools Local environment

8.4 GRADE 4 TOPIC 4: WATER

TOPIC	OBJECTIVES	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Water conservation	<ul style="list-style-type: none"> • • • 	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • • • • <p>NB. Teacher to exercise caution during educational tour</p>	<ul style="list-style-type: none"> • • • •

8.5 GRADE 4 TOPIC 5: PLANTS

TOPIC	OBJECTIVES	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Introduction to the study of plants	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • • • • <p>NB. Teacher to closely monitor the collection process</p>	<ul style="list-style-type: none"> • • • •
Plant nutrition	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • - - - 	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • • •

Agriculture Junior (Grade 3 - 7) Syllabus

TOPIC	OBJECTIVES	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Vegetable crops	<ul style="list-style-type: none"> • • • 	<ul style="list-style-type: none"> • - - - - • - - - - - • 	<ul style="list-style-type: none"> • <p>NB. Teacher to ensure that learners do not taste fertilisers</p> <ul style="list-style-type: none"> • • • - - - - <p>N.B Pupils can grow other vegetable crops</p>	<ul style="list-style-type: none"> • • • • • • •
Field crops	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • • • • • 	<ul style="list-style-type: none"> • • • • •

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Orchard/fruit trees	<ul style="list-style-type: none"> state the importance of fruit trees classify fruit trees as indigenous and exotic trees 	<ul style="list-style-type: none"> Importance of fruit trees Indigenous and exotic fruit trees 	<ul style="list-style-type: none"> Discussing the importance of trees Naming exotic and indigenous trees Educational touring to identify indigenous and exotic fruit trees Classifying fruit trees as exotic and indigenous <p>N.B. Teacher to discourage learners from climbing fruit trees</p>	<ul style="list-style-type: none"> Recommended textbooks Fruit trees Print media ICT tools
Ornamental horticulture	<ul style="list-style-type: none"> state the importance of ornamental plants classify ornamental plants 	<ul style="list-style-type: none"> Importance of ornamental plants Classification of ornamental plants: <ul style="list-style-type: none"> Shrubs Flowers Lawns Trees 	<ul style="list-style-type: none"> Discussing the importance of ornamental plants Grouping ornamental plants 	<ul style="list-style-type: none"> Ornamental plants ICT tools Recommended textbooks Print media
Forestry	<ul style="list-style-type: none"> explain the importance of trees identify indigenous and exotic trees in the locality 	<ul style="list-style-type: none"> Importance of trees Indigenous and exotic trees 	<ul style="list-style-type: none"> Discussing the importance of trees Naming exotic and indigenous trees Educational touring to identify indigenous and exotic trees 	<ul style="list-style-type: none"> Indigenous and exotic trees Recommended textbooks ICT tools Print media

	<p>Learners should be able to:</p> <ul style="list-style-type: none"> • identify causes of plant damage 	<ul style="list-style-type: none"> • Causes of plant damage: <ul style="list-style-type: none"> - fire - animals - lightning - wind - hailstorm - pests - diseases - frost - drought 	<ul style="list-style-type: none"> • Discussing causes of plant damage • Educational touring to observe plant damage 	<ul style="list-style-type: none"> • Recommended textbooks • ICT tools • Damaged plants • Print media
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GRADE 4

TOPIC 6: ANIMALS

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Introduction to animal study	<ul style="list-style-type: none"> list uses of domestic animals 	<ul style="list-style-type: none"> Uses of domestic animals 	<ul style="list-style-type: none"> Naming domestic animals Discussing uses of domestic animals Observing situations where domestic animals are used Drawing domestic animals Modelling domestic animals 	<ul style="list-style-type: none"> Recommended texts Domestic animals ICT tools Print media Products and by-products from domestic animals
Animal nutrition	<ul style="list-style-type: none"> identify types of animal feeds classify the animal feeds as natural and commercial 	<ul style="list-style-type: none"> Animal feeds 	<ul style="list-style-type: none"> Naming animal feeds Grouping the animal feeds as natural and commercial Collecting samples of feeds Feeding animals kept in the school 	<ul style="list-style-type: none"> Recommended texts ICT tools Samples of feeds Animals
Small livestock production (poultry or rabbits)	<ul style="list-style-type: none"> name the types of small livestock 	<ul style="list-style-type: none"> Types of small livestock: <ul style="list-style-type: none"> poultry or rabbits 	<ul style="list-style-type: none"> Listing examples of poultry. Drawing types of poultry or rabbits Modelling poultry or rabbits Educational touring to observe different types of poultry and rabbits 	<ul style="list-style-type: none"> Recommended textbooks Print media ICT tools Poultry or rabbits
Apiculture	<ul style="list-style-type: none"> define apiculture distinguish bees from other insects 	<ul style="list-style-type: none"> Apiculture: <ul style="list-style-type: none"> characteristics of bees 	<ul style="list-style-type: none"> Describing the differences between bees and other insects Drawing the bee 	<ul style="list-style-type: none"> ICT tools Print media Recommended textbooks Bee specimen

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Farm machinery	<ul style="list-style-type: none"> list farm machinery 	<ul style="list-style-type: none"> Types of farm machinery 	<ul style="list-style-type: none"> Listing various types of farm machinery Drawing of farm machinery Educational touring to a farm/homestead to observe farm machinery Keeping an inventory of farm machinery 	<ul style="list-style-type: none"> Recommended textbooks ICT tools Print media Farm machinery

GRADE 4 TOPIC 8 : AGRI-BUSINESS

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED NOTES
Agri Business	<ul style="list-style-type: none"> identify local/retail markets 	<ul style="list-style-type: none"> Local/ retail markets 	<ul style="list-style-type: none"> Listing agricultural products found at the markets and their prices Educational touring to the markets in the locality to observe marketing activities 	<ul style="list-style-type: none"> Local markets Print media ICT tools A:vDwffttwixhAoitTpyl

10.1 GRADE 5

TOPIC 1 : INTRODUCTION TO AGRICULTURE AND BASIC FARM TOOLS

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Importance of Agriculture	<ul style="list-style-type: none"> explain the importance of Agriculture to the community and the nation 	<ul style="list-style-type: none"> Importance of Agriculture to the community and the nation 	<ul style="list-style-type: none"> Educational touring to observe commercial agricultural activities Listing agricultural activities done in their community and nation Discussing the benefits of agricultural activities done in their community and the nation 	<ul style="list-style-type: none"> ICT tools Print media Recommended textbooks
Farm tools	<ul style="list-style-type: none"> classify tools according to their uses 	<ul style="list-style-type: none"> Classification of farm tools according to their use: <ul style="list-style-type: none"> Digging tools Cutting tools Watering tools Spraying tools 	<ul style="list-style-type: none"> Matching the tools to their uses Collecting and grouping tools according to their uses Sketching farm tools Designing and keeping an inventory of farm tools 	<ul style="list-style-type: none"> ICT tools Recommended textbooks Print media Farm tools
Safety in agriculture	<ul style="list-style-type: none"> explain the safe use of farm tools and implements use farm tools safely 	<ul style="list-style-type: none"> Safe use of farm tools and implements 	<ul style="list-style-type: none"> Discussing the safe use of farm tools and implements Demonstrating the safe use of farm tools and implements 	<ul style="list-style-type: none"> Print media Farm tools Farm implements ICT tools Recommended textbooks

10.2 GRADE 5

TOPIC 2 : CLIMATE AND LAND USE

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Climate	<ul style="list-style-type: none"> • define weather • explain the influence of weather on agricultural activities 	<ul style="list-style-type: none"> • Weather • Influence of weather on agricultural activities 	<ul style="list-style-type: none"> • Conducting educational tour to weather station to observe how weather elements are recorded • Discussing weather elements and their influence on agricultural productive • Comparing agricultural activities in different seasons 	<ul style="list-style-type: none"> • ICT tools • Recommended textbooks • Print media • Weather station

10.4 GRADE 5
TOPIC 4: WATER

	<p>Learners should be able to:</p> <ul style="list-style-type: none"> • describe methods of harvesting water • state methods of storing water • describe methods of conserving water 	<ul style="list-style-type: none"> • Water harvesting • Water storage • Methods of conserving water 	<ul style="list-style-type: none"> • Naming of water harvesting and storage methods • Naming various water conservation structures in their locality • Identifying methods of recycling water • Discussing methods of conserving water • Comparing seed beds which are mulched and those which are not mulched • Practising water harvesting techniques 	<ul style="list-style-type: none"> • Recommended textbooks • Water storage tanks • Seed bed • Mulching materials • Print media • ICT tools
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GRADE 5

TOPIC 5: PLANTS

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Importance of Agriculture	<ul style="list-style-type: none"> explain the importance of Agriculture to the community and the nation 	<ul style="list-style-type: none"> Importance of Agriculture to the community and the nation 	<ul style="list-style-type: none"> Educational touring to observe commercial agricultural activities Listing agricultural activities done in their community and nation Discussing the benefits of agricultural activities done in their community and the nation 	<ul style="list-style-type: none"> ICT tools Print media Recommended textbooks
Farm tools	<ul style="list-style-type: none"> classify tools according to their uses 	<ul style="list-style-type: none"> Classification of farm tools according to their use: <ul style="list-style-type: none"> Digging tools Cutting tools Watering tools Spraying tools 	<ul style="list-style-type: none"> Matching the tools to their uses Collecting and grouping tools according to their uses Sketching farm tools Designing and keeping an inventory of farm tools 	<ul style="list-style-type: none"> ICT tools Recommended textbooks Print media Farm tools
Safety in agriculture	<ul style="list-style-type: none"> explain the safe use of farm tools and implements use farm tools safely 	<ul style="list-style-type: none"> Safe use of farm tools and implements 	<ul style="list-style-type: none"> Discussing the safe use of farm tools and implements Demonstrating the safe use of farm tools and implements 	<ul style="list-style-type: none"> Print media Farm tools Farm implements ICT tools Recommended textbooks

TOPIC	OBJECTIVES	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Field crops	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> - - - - - - - - - 	<ul style="list-style-type: none"> • • • • - - - - - 	<ul style="list-style-type: none"> • • • • • •
Orchard / Fruit Trees	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • - - - - - - - 	<ul style="list-style-type: none"> • • • • 	<ul style="list-style-type: none"> • • • • • •

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Ornamental horticulture	<ul style="list-style-type: none"> establish flower beds 	<ul style="list-style-type: none"> Establishment of flower beds <ul style="list-style-type: none"> Land preparation Varieties/cultivars Planting time Planting method Spacing Management of flowers Harvesting Marketing 	<ul style="list-style-type: none"> Collecting seeds Growing flowers around the school Educational touring to flower gardens to observe a variety of flowers Marketing of flowers <ul style="list-style-type: none"> Grading Packaging Pricing Advertising Selling 	<ul style="list-style-type: none"> Seeds Flowers Recommended textbooks Fertilisers ICT tools Print media
Forestry	<ul style="list-style-type: none"> establish a nursery of exotic and indigenous trees manage a nursery of exotic and indigenous tree seedlings market exotic and indigenous tree seedlings list effects of animals, fire and drought on plants 	<ul style="list-style-type: none"> Establishment of a nursery <ul style="list-style-type: none"> Management of a nursery Marketing of nursery products Effects of animals, drought and veld fires on plants Methods of controlling plant damage 	<ul style="list-style-type: none"> Collecting seed and cuttings of exotic and indigenous trees Propagating exotic and indigenous trees Managing nursery such as weeding, making fireguards, fencing, watering and diseases and pest control. Marketing seedlings Making fire guards, fencing and scaring animals Mulching Planting drought tolerant plants Irrigating plants 	<ul style="list-style-type: none"> Seeds Cuttings Seedlings ICT tools Recommended textbooks Print media Polythene pots Planting medium Recommended textbooks Print media ICT tools Plants Mulching materials Irrigation equipment
Plant Protection				

**10.6 GRADE 5
TOPIC 6: ANIMALS**

TOPIC	OBJECTIVES	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Introduction to animal study	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • • • • 	<ul style="list-style-type: none"> • • • • •
Animal Nutrition	<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • • • 	<ul style="list-style-type: none"> • • • •
Small Livestock Production (poultry or rabbits)	<ul style="list-style-type: none"> • • • • 	<ul style="list-style-type: none"> • - - - 	<ul style="list-style-type: none"> • • • • 	<ul style="list-style-type: none"> • • • • • • •

TOPIC	OBJECTIVES	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Apiculture	Learners should be able to: <ul style="list-style-type: none"> • identify natural and artificial bee hives • describe natural and artificial bee hives 	<ul style="list-style-type: none"> • Types of bee hives: - natural bee hives (ant hill, tree hole) - artificial bee hives (top bar, bark and lung stroth) 	<ul style="list-style-type: none"> • Discussing natural and artificial bee hives • Drawing bee hives • Making models of bee hives 	<ul style="list-style-type: none"> • Print media • Recommended textbooks • ICT tools • Resource person such as bee hive maker

10.7 GRADE 5 TOPIC 7: FARM IMPLEMENTS AND MACHINERY

TOPIC	OBJECTIVES	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Farm implements	Learners should be able to: <ul style="list-style-type: none"> • state uses of farm implements 	<ul style="list-style-type: none"> • Uses of farm implements 	<ul style="list-style-type: none"> • Discussing the uses of farm implements • Conducting educational tour to observe farm implements • Keeping an inventory of farm implements NB. Learners should not operate farm implements without supervision 	<ul style="list-style-type: none"> • Recommended textbooks • Farm implements • Print media • ICT tools

**10.8 GRADE 5
TOPIC 8: AGRI BUSINESS**

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Agri Business	<ul style="list-style-type: none"> • prepare sales records for an agricultural enterprise • prepare input records for an agricultural enterprise 	<ul style="list-style-type: none"> • Financial records • Production records 	<ul style="list-style-type: none"> • Discussing financial and production records • Keeping records of inputs and outputs of the enterprise carried out at the school • Preparing financial and production records 	<ul style="list-style-type: none"> • Recommended textbooks • Print media • ICT tools • Receipt books • Invoices

GRADE 6 11.1

TOPIC 1: INTRODUCTION TO AGRICULTURE

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Importance of Agriculture	<ul style="list-style-type: none"> name the branches of agriculture describe the activities involved in each branch 	<ul style="list-style-type: none"> Branches of Agriculture: <ul style="list-style-type: none"> Crop production Animal production Soil science Agricultural Engineering Agricultural economics Horticulture Forestry and Wildlife 	<ul style="list-style-type: none"> Listing the branches of Agriculture Educational touring to identify agricultural branches in their communities Listing the activities of each branch 	<ul style="list-style-type: none"> Recommended textbooks Print media ICT tools Resource person such as ARES/AGRITEX officers
Basic farm tools	<ul style="list-style-type: none"> state different ways of maintaining farm tools list characteristics of good storage facilities for farm tools model a farm tool rack 	<ul style="list-style-type: none"> Maintenance of farm tools Characteristics of good storage facilities <ul style="list-style-type: none"> well ventilated roofed secure Farm tool rack 	<ul style="list-style-type: none"> Demonstrating tool maintenance such as cleaning tools after use, drying, painting, greasing and oiling Discussing tool storage at school and at home Modelling a farm tool rack Designing and keeping an inventory of farm tools 	<ul style="list-style-type: none"> Recommended textbooks Print media ICT tools Farm tools Materials to protect farm tools such as lubricants, paints Local materials for construction of a tool rack
Safety in agriculture	<ul style="list-style-type: none"> describe safe ways of handling agro-chemicals 	<ul style="list-style-type: none"> Safe use of agro-chemicals 	<ul style="list-style-type: none"> Collecting and interpreting colour codes on chemical containers Discussing the effects in poor handling of agro-chemicals <p>NB. Pupils below 16 years of age should not handle chemicals</p>	<ul style="list-style-type: none"> Print media ICT tools Recommended textbooks Chemical labels

GRADE 6
TOPIC 2: CLIMATE AND LAND USE

TOPIC	OBJECTIVES	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Climate and Land use	•	•	•	•
	•	•	•	•
	•	•	•	•
	•		•	•
			•	•

GRADE 6

TOPIC 3: SOIL

TOPIC	OBJECTIVES Learners should be able to	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Soil Composition	<ul style="list-style-type: none"> state the functions of soil components 	<ul style="list-style-type: none"> functions of : <ul style="list-style-type: none"> soil mineral matter soil water soil air soil organic matter 	<ul style="list-style-type: none"> discussing functions of soil components 	<ul style="list-style-type: none"> recommended textbooks print media soil samples ICT tools
Soil Formation	<ul style="list-style-type: none"> define weathering state agents of weathering 	<ul style="list-style-type: none"> Weathering <ul style="list-style-type: none"> weathering agents: <ul style="list-style-type: none"> moving animals running water growing plants wind 	<ul style="list-style-type: none"> Conducting educational tour to observe types of weathering carrying out experiments to demonstrate the weathering process 	<ul style="list-style-type: none"> print media ICT tools recommended textbooks Rock samples
Soil Types	<ul style="list-style-type: none"> describe the properties of clay, loam and sand soil 	<ul style="list-style-type: none"> Properties of different soil types 	<ul style="list-style-type: none"> Collecting and identifying different soil types Carrying out experiments to determine air content, water holding capacity and drainage Discussing properties of soil types 	<ul style="list-style-type: none"> Soil samples Water Recommended textbooks Print media ICT tools
Soil Fertility	<ul style="list-style-type: none"> identify sources of organic matter prepare liquid manure 	<ul style="list-style-type: none"> Sources of organic manures: <ul style="list-style-type: none"> compost fertility trench liquid manure green manure animal manure 	<ul style="list-style-type: none"> Collecting and labelling different organic fertilisers Naming sources of organic fertilisers Preparing liquid manure 	<ul style="list-style-type: none"> Print media Recommended textbooks ICT tools Water Grass Animal waste Drum

TOPIC	OBJECTIVES Learners should be able to	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Soil Erosion	<ul style="list-style-type: none"> • identify eroded areas in their locality • describe the effects of soil erosion 	<ul style="list-style-type: none"> • Effects of soil erosion 	<ul style="list-style-type: none"> • educational touring to identify affected areas in the locality • discussing effects of soil erosion 	<ul style="list-style-type: none"> • Print media • Recommended textbooks • ICT tools • Local environment
Soil Pollution	<ul style="list-style-type: none"> • define soil pollution • explain the causes of soil pollution • explain effects of soil pollution 	<ul style="list-style-type: none"> • Soil pollution • Causes of soil pollution: <ul style="list-style-type: none"> - industrial waste - chemicals - fertilisers - litter - mining • Effects of soil pollution 	<ul style="list-style-type: none"> • Discussing the causes of soil pollution • Explaining effects of soil pollution • Educational touring to identify polluted soils 	<ul style="list-style-type: none"> • Print media • Recommended textbooks • ICT tools • local environment • Samples of pollutants

**GRADE 6
TOPIC 4: WATER**

	<p>Learners should be able to:</p> <ul style="list-style-type: none"> list the methods of soil moisture conservation describe conservation methods demonstrate soil moisture conservation technique 	<ul style="list-style-type: none"> Soil moisture conservation methods: <ul style="list-style-type: none"> mulching manuring pot holing tied ridging 	<ul style="list-style-type: none"> Listing soil moisture conservation methods Discussing soil moisture conservation methods Demonstrating different soil moisture conservation methods Practising soil moisture conservation methods 	<ul style="list-style-type: none"> Print media Recommended textbooks ICT tools Moisture conservation materials such as manure, combed grass
<ul style="list-style-type: none"> define water pollution state causes of water pollution explain the effects of water pollution 	<ul style="list-style-type: none"> Water pollution Causes of water pollution Effects of water pollution 	<ul style="list-style-type: none"> Identifying sources of water pollution in their locality Discussing causes and effects of water pollution Educational touring to identify effects of water pollution 	<ul style="list-style-type: none"> Samples of polluted water print media ICT tools recommended textbooks Polluted water sources 	

**GRADE 6
TOPIC 5: PLANTS**

TOPIC	OBJECTIVES	CONTENT	SUGGESTED ACTIVITIES AND NOTES	SUGGESTED RESOURCES
Plant structure	•	• - - - -	• • •	• • • •
Plant nutrition	• •	• • - -	• •	• • •
Vegetable crops	• •	• - - - - - - - - - •	• • • • • • - - - - -	• • • • •

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**GRADE 6
TOPIC 6: ANIMALS**

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**GRADE 6
TOPIC 7: FARM IMPLEMENTS AND MACHINERY**

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GRADE 6
TOPIC 8: AGRI BUSINESS

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**12.1 GRADE 7
TOPIC 1: IMPORTANCE OF AGRICULTURE**

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**12.3 GRADE 7
TOPIC 3: SOIL**

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12.4 GRADE 7
TOPIC 4: WATER

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12.5 GRADE 7
TOPIC 5 : PLANTS

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**12.6 GRADE 7
TOPIC 6: ANIMALS**

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12.7 GRADE 7
TOPIC 7: FARM IMPLEMENTS AND MACHINERY

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12.8 GRADE 7
TOPIC 8: AGRI BUSINESS

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Paper	Description	Weighting for general paper %
1	Multiple Choice	35
2	Structured questions	30
3	Continuous assessment	35

Continuous assessment will be done as follows:

Assessment mode	Weighting	Assessment Frequency
Project Portfolio	10%	Once per year/ per grade
Psychomotor skills	10%	Once per term/ per grade
Theory tests	10%	Twice per term/ per Grade
Practical diary	5%	Every time a practical is carried out and the recordings are averaged to the stated weighting

Assessment

Candidates are going to sit for the following papers namely:

Paper 1: multiple choice

Paper 2: structured paper

PAPER	TYPE OF PAPER	DURATION	WEIGHTING
1	Multiple Choice	1 Hour	35
2	Structured Paper	2 Hours	30

PAPER 1

This is a multiple choice paper consisting of 50 questions. The paper is marked out of 50 and then weighted to 25%

PAPER 2

This is a structured short answer type paper. This Paper is marked out of 50. It consist of two sections namely Section A and Section B

Section A

Consist of 6 compulsory short questions from key concepts of the syllabus, each question carries five marks. Section total is 30 marks.

Section B

Four questions are set from key concepts of the syllabus. Candidates answer 2 questions. Each questions carries 10 marks. Section total is 20 marks.

Specification grid

SKILL	OBJECTIVES	WEIGHTING %	ASSESSMENT COMPONENT
Knowledge with understand	1	55	1& 2
Application of knowledge	2	35	1& 2
Problem solving	3	10	1& 2
TOTAL		100	

TOPIC	SKILL 1	SKILL 2	SKILL 3	Total questions per topic
6.1	4	2		6
6.2	4	3	1	8
6.3	4	2	1	7
6.4	4	1		5
6.5	3	3	1	7
6.6	3	2	1	6
6.7	3	2		5
6.8	3	2	1	5
Total marks per skill	28	17	5	50

Candidates are required to sit for two written papers of Agriculture and a project portfolio should be submitted for assessment.

10. APPENDIX 1

BASIC FARM TOOLS PER CLASS OF 40

ITEM	QUANTITY	ITEM	QUANTITY
Hoes	40	Watering buckets	20
Rakes	10	Tape measures	1
Shovels	10	Slashes	40
Spades	10	Sickles	40
Garden forks	10	Garden dibber	40
Hand forks	15	Claw hammer	2
Garden trowel	5	Pliers	2
Watering can	40	Secateur	5
Wheel barrow	1	Hand axe	5
Mattock	2	Bow saw	2
Pick	2	Garden line	1 x 100m
Hose pipe	1 x 100m	50 kg measuring scale	1

PROPOSED COMPONENTS OF THE PRACTICAL BOOK (DIARY)

The diary should be written in first person narration. For example, "I used a hoe to dig"

DATE: The date on which the practical activity was done should be recorded. For example 06 December 2008

TASK: Write the topic of the practical work done. For example; Weeding nursery. The topic should summarise what was done during practical work.

TOOLS USED: on this part, the learner records the tools s/he used during the practical work. For example; hand fork and dibber/ sticks

WORK DONE:

On this section of the diary, the learner records the actual activities s/he has done. Some may want to refer to it as What I did, Activities or Steps taken. All is acceptable as long as it brings out what the learner did during the practical. For example, if the practical was weeding, the following could be the activities done;

- I took a hand fork/ dibber
- I used it to lightly dig the nursery bed
- I removed the weed by hands
- Some weeds were too close to the seedling, I up-rooted them by hands
- I picked all stones that were in the bed
- I mended the ridges after weeding

WHAT I LEARNT:

some may prefer to call it "what I observed", it will still be acceptable as long as it is a record of what the learner learnt and observed during the practical activity. For example;

- I learnt that removing weeds by a hand fork is easy because the hand fork is light
- I learnt that removing weeds by a hand fork loosens the soil and allows air to get in
- I learnt that if I dig too deep, I will up-root the seedlings
- If I re-ridge, water will not spill from the bed
- They were many weeds in the bed such as the black jack.

ASSESSMENT OF THE PRACTICAL BOOK (DIARY)

TASK	1
TOOLS USED	2
WORK DONE	4
WHAT I LEARNT	3
TOTAL	10

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