TWINKLE JUNIOR SCHOOL JINJA, MUTAI

PRIMARY FIVE TERM TWO SCHEME OF WORK FOR INTEGRATED SCIENCE BY (*TIKYILYA SHABAN, 0706-345-172/0781-268-664*)

TOPICS TO BE COVERED

1. THEME: THE ENVIRONMENT
   TOPIC: COMPONENTS OF THE ENVIRONMENT (SOIL)

2. THEME: MATTER AND ENERGY
   TOPIC: HEAT ENERGY

3. THEME: SCIENCE IN HUMAN ACTIVITIES AND OCCUPATION
   TOPIC: GROWING CROPS (TUBER CROPS)

4. THEME: THE WORLD OF LIVING THINGS
   TOPIC: BACTERIA AND FUNGI

NO.	THEME	TOPIC	MAIN SUB-TOPICS	LEARNING OUTCOME
1.	The environment	Soil	Types of soil Soil formation Components of soil Importance of soil Soil erosion Harmful materials on soil and their effects. Soil exhaustion Soil conservation Soil fertility	The learner is able to recognize the causes of soil degradation, demonstrate the practices of conserving soil and appreciate the importance of soil in nature.
2.	Matter and energy	Heat energy	Matter Properties of matter. States of matter. Effects of heat on matter Changes in states of matter. Heat transfer. Mixtures Forces Energy Expansion and contraction The thermos flask Thermometers	The learner is able to the basic scientific knowledge on effects of heat on things in the environment and demonstrates the skills of investigating the effects of heat on matter.

3.	Science in human activities and occupation	Crop growing	Types of crops grown Caring for crops Common crop pests and diseases Common tuber crops Planting, care and harvesting of tuber crops. Storage of tuber crops Science oriented clubs (young farmers clubs)	The learner is able to show knowledge about common tuber crops, demonstrates growing of tuber crops and appreciates the importance of proper harvesting, processing and storing of tuber crops.
4.	The world of living things	Bacteria and fungi	Bacteria (what they are and breeding) Nature of bacteria. Bacterial diseases in plants and animals. Prevention, control and treatment of bacterial diseases. Fungi (what they are and examples) Harmful and useful fungi Fungal diseases in plants and animals. Prevention, control and treatment of fungal diseases. Facts about bacteria and fungi. Comparison of bacteria and fungi (differences and similarities)	The is able to use the scientific knowledge about bacteria and fungi as disease agents and how they can be used to solve problems in everyday experiences.

WEEK	PERIOD	THEME	TOPIC	CONTENT	SUBJECT COMPETENCES	LANGUAGE COMPETENCES	METHODS	ACTIVITIES	SKIILS AND VALUES	REF	IMS	REM
1	1.	Orientation and revision										
	2.	THE INVIRONMENT	COMPONENTS OF THE ENVIRONMENT (SOIL)	<u>Soil</u> Meaning of soil. Terms used in soil. Importance soil. Soil formation. Components of soil	**The learner;** Defines soil. Writes the meaning different terminologies about soil. Tells how soil is important to plants and animals. Explains the methods of soil formation. Describes the constituents of soil.	The learner; Writes, reads, pronounces, and spells the new vocabulary about soil e.g. soil, drainage, capillarity, retention, sampling etc. Writes short sentences using the new vocabulary.	Class discussion Observation Guided discovery Excursion	Defining soil Naming the components of soil. Stating the methods of soil formation	Confidence Sharing Interpersonal relationship	▪ MK bk 5 ▪ Comprehensive sci Bk 5 ▪ Personal collection	Soil Decaying matter	

	3.			<u>Soil profile</u> What is soil profile? Soil horizons and their x-tics Importance of soil profile	Describes soil profile Names the layers of soil profile. Draws and names the soil layers.	Writes and reads sentences about soil profile. Recites a rhyme about soil profile.	Excursion Explanation Observation Guided discussion	Defining soil profile Drawing the diagram showing soil layers Naming soil layers	Audibility Responsibility Meaningfulness Self-expression Appreciation	▪ MK bk 5 ▪ Comprehensive sci Bk 5 ▪ Personal collection	A deep pit	

	4.			<u>Types of soil</u> Characteristic of each type of soil (loam, sand and clay). Uses of each type of soil	Names the types of soil Describes the characteristic of each type of soil. Tells the different uses of each type of soil.	Reads, pronounces and writes new vocabulary like loam, clay and sand. Reads and writes the given texts about types of soil.	Observation Class discission Guides discovery	Naming the types of soil. Describing the uses of different types of soil.	Self-expression Appreciation Acceptance Concern Responsibility	▪ MK bk 5 ▪ Comprehensive sci Bk 5 ▪ Personal collection	Sample of loam, clay and sand soil.	

	5.			<u>Soil drainage, capillarity and retention</u> Experiments to investigate on drainage, capillarity and retention of different types of soil.	Defines drainage, capillarity and retention as related to soil. Describes experiments to investigate the rates of drainage, capillarity and retention of different types of soil.	Draws correct diagrams showing drainage and capillarity of all the types of soil.	Experimentation Observation Explanation Class discussion Guided discovery	Setting up experiment to investigate on the rate of drainage in groups of 5s	Appreciation Self-expression Fluency Responsibility Logic Creativity Empathy	▪ MK bk 5 ▪ Comprehensive sci Bk 5 ▪ Personal collection	Soil samples of clay, loam and sand. Water Beakers Measuring cylinder Pieces of cloth/cotton wool	
	6.			<u>Soil erosion</u> What it is Causes, agents and control of soil erosion	Discusses the causes and causes of soil erosion. Gives ways of controlling soil erosion	Reads and writes simple texts about soil erosion	Excursion Class discussion Observation Guided discovery	Describing causes, agents and ways of controlling soil erosion.	Responsibility Critical thinking Problem solving	▪ MK bk 5 ▪ Comprehensive sci Bk 5 ▪ Personal collection	Flash cards	

2.	1.			<u>Soil conservation and exhaustion</u> What they are Ways of conserving soil Causes and control of soil exhaustion	Tells the meaning of soil conservation Discusses the ways of conserving soil Describes the causes of soil exhaustion	Spells and articulates words correctly Reads and writes notes about soil conservation correctly	Whole class discussion Excursion Guided discovery Observation	Discussing the ways of conserving soil Sharing the causes of soil exhaustion Describing ways of controlling soil exhaustion	Acceptance fluency creative thinking critical thinking Logical reasoning self-expression	▪ MK bk 5 ▪ Comprehensive sci Bk 5 ▪ Personal collection	Flash cards	
	2.			<u>Soil fertility</u> Meaning of soil fertility Types of fertilizers Preparation some natural fertilizers Advantages	Discusses soil fertility and types of fertilizers Demonstrates how organic fertilizers are obtained Discusses the	Names the examples off fertilizers correctly Writes and reads sentences about soil fertility correctly	Excursion Observation Think pair and share Explanation	Naming natural fertilizers Discussing the advantages and disadvantages of natural Fertilizers	Problem solving Appreciation Decision making Self-expression Confidence	MK bk 5 Comprehensive sci Bk 5 Personal collection	Rubbish pit School garden	

				And disadvantages of natural fertilizers	Advantages and disadvantages of natural fertilizers				Creative thinking			
	3.			<u>Artificial fertilizers</u> Meaning of artificial fertilizers Classes of artificial fertilizers Advantages and disadvantages of artificial fertilizers Methods of applying fertilizers	Gives the difference between organic and inorganic fertilizers Discusses the groups of inorganic manure and their examples Describes the advs and disadvs of artificial fertilizers Tells the methods of applying fertilizers	Recites a poem about fertilizers Writes and reads words and sentences about fertilizers	Excursion Class discussion Observation Guided discovery	Naming the examples of inorganic manure Explaining the advantages of using artificial fertilizers Discussing the dangers of using artificial fertilizers Demonstrating the methods of applying fertilizers	Appreciation Logic Critical thinking Concern Responsibility Self-expression Self esteem	MK bk 5 Comprehensive sci Bk 5 Personal collection	Solid and liquid fertilizers Water Jerrycan Knap sac sprayer A light piece of cloth	

	4.			<u>Harmful materials on soil</u> Meaning of soil pollutants Examples of soil pollutants Effects of harmful materials on soil Ways people pollute soil and control of soil pollution	States the effects of harmful materials on soil Suggests the safe ways of handling harmful materials on soil	Writes words and sentences about soil correctly Names the harmful materials on soil Describes the effects of harmful materials on soil	Excursion Observation Whole class discussion Guided discovery	Naming soil pollutants Stating the effects of harmful materials on soil Discussing the safe ways of handling soil pollutants Explaining different ways through which some farmers lower the productivity of soil.	Fluency Problem solving Responsibility Being open Creative thinking Critical thinking Concern Appreciation	MK bk 5 Comprehensive sci Bk 5 Personal collection	Polythene papers Plastics Old metals (all collected from soil)	
	5.			**END OF TOPIC EVALUATION TEST**								

	6.	MATTER AND ENERGY	HEAT ENERGY	<u>Matter</u> Meaning of matter, mass and volume States of matter Properties of matter	Defines matter Tells the states of matter Experiments on the properties of matter	Correctly spells and reads words related to matter eg matter, volume weight, occupy etc	Experimentation Class discussion Observation	Defining matter. Naming the states of matter. Mentioning examples of different states of matter.	Confidence Appreciation Problem solving Sympathy	MK bk 5 Comprehensive sci Bk 5 Personal collection	Water Balloons Bottles Heater Glasses	
3.	1.			<u>Composition of matter</u> What matter is made of. Characteristics of each state of matter. Arrangement of particles in	Tells the meaning of molecules and atoms. Describes the characteristics of all the states of matter. Uses diagrams to distinguish	Listens and writes the words about matter correctly	Illustration Class discussion Observation Guided discovery	Stating the characteristics of each state of matter. Drawing diagrams to the arrangement of molecules in different states of matter.	Self esteem Sharing Care Concern Critical thinking	MK bk 5 Comprehensive sci Bk 5 Personal collection	Water Powder Piece of wood A stone	

				states of matter.	between the states of matter.							
	2.			<u>Properties of liquids</u> Surface tension and its application Cohesion, adhesion, capillary action, diffusion and dilution	Gives meaning, examples and application of surface tension, cohesion, adhesion, capillary action, diffusion and dilution in our daily life.	Writes and reads short sentences and stories related to properties of liquids.	Experimentation Observation Class discussion	Defining given terms related to properties of liquids. Discussing the application of liquid properties	Care Confidence Taking decisions Problem solving	MK bk 5 Comprehensive sci Bk 5 Personal collection	Paraffin Water Milk Wick/piece of cloth Plastic tin	
	3.			<u>Pressure in liquids and gases</u> Experiments Application oof pressure in	Experiments on pressure in liquids and gases Discusses the application of pressure	Writes and reads sentences about liquids and gases.	Experimentation Class discussion Observation	Carrying out experiments on pressure in liquids and gases in groups.	Care Empathy Self-expression Appreciation	MK bk 5 Comprehensive sci Bk 5	Water Glass Tin Heater Syringe	

				liquids and gases in day-to-day activities	in liquids and gases				concern	Personal collection	Cardboard	
	4.			<u>Changes in states of matter</u> Melting, freezing, evaporation, sublimation, condensation, deposition	Discusses the conditions needed the changes to occur. Identifies the changes in states off matter.	Writes notes about changes in states of matter correctly Reads the given text related to changes in states of matter correctly.	Experimentation Discussion Observation Explanation	Summarizing the changes in states of matter using an illustration.	Care Appreciation Confidence Concern Creative thinking Problem solving	MK bk 5 Comprehensive sci Bk 5 Personal collection	Ice cubes Metallic beaker Water Heater A bottle of cold water	
	5.			<u>Mixtures</u> What they are Examples of mixtures Dissolving substances	Describes the examples of mixtures, solutes and solvents.	Reads and writes words and sentences about mixtures.	Experimentation Class discussion Observation	Naming examples of mixtures, solutes and solvents.	Articulation Taking decisions Care Critical thinking	MK bk 5 Comprehensive sci Bk 5	Salt sugar Water Milk Oil	

							Explanation			Personal collection	Flour Iron fillings	
	6			<u>Separating mixtures</u> Separating solid-liquid mixtures using sedimentation and decantation, filtration and evaporation to dryness(crystallisation)	Experiments on decantation, filtration and evaporation to dryness. Explains the application of filtration, decantation and crystallisation in our everyday life.	Reads and writes words related to mixtures correctly. Draws diagrams showing experiments on filtration, decantation and crystallisation.	Whole class discussion Experimentation Observation Guided discovery	Discussing about mixtures in groups. Drawing diagrams showing the experiments.	Responsibility Problem solving Taking decision Care Appreciation Articulation	MK bk 5 Comprehensive sci Bk 5 Personal collection	Filter funnel Filter paper Flour Beakers Muddy water Heater Salt Clean water	
4.	1			<u>Separating mixtures of liquids</u> (fractional distillation	Carries out separating using a separating funnel, hand	Reads and writes sentences and words related to	Guided discovery Observation	Separating the given mixtures in groups.	Care Esteem	MK bk 5	Magnets Iron fillings	

				and separating funnel) Separating mixtures of solids (floatation, sieving, hand picking winnowing and using magnets)	picking, winnowing etc.	separation of solid mixtures.	Class discussion		Problem solving Decision making	Compr ehensi ve sci Bk 5 Persona l collectio n	Beans with husks Water Separating funnel Paraffin Cooking oil	
4.	2			<u>Energy</u> What energy is Types of energy Forms of energy Energy interconver sion	Demonstrate s kinetic and potential energy Experiments on energy interconversi on	Draws diagrams of bodies possessing kinetic and potential energy	Experime ntation Demonstr ation Discussion Observati on	Naming types and forms of energy. Discussing the sources of different forms of energy	Appreciation Care Problem solving Confidence Concern	MK bk 5 Compr ehensi ve sci Bk 5 Persona l collectio n	Books Ball Pendulum bob	

	3			<u>Heat energy</u> Meaning of heat Sources of heat Uses of heat Effects of heat on matter	Explains the sources and uses of heat in the environment Discusses the effects of heat loss and gain	Writes and reads notes related to heat correctly	Class discussion Observation Guided discovery	Discussing the human activities done by the help of heat	Problem solving Appreciation Care Concern Critical thinking	MK bk 5 Comprehensive sci Bk 5 Personal collection	Candles Electric bulbs Charts	
	4			<u>Heat transfer</u> Meaning of heat transfer Methods of heat transfer Application of heat transfer in day-to-day life	States the examples of radiation Compares the rate of heat transfer by all methods	Writes and reads words and sentences related to heat transfer correctly	Explanation Observation Guided discovery	Explaining applications of radiation in daily life	Appreciation Concern Taking decision	MK bk 5 Comprehensive sci Bk 5 Personal collection	Nail Heater Wax	

	5			<u>Convectional currents in our daily life</u> Convection in chimneys Ventilation in living houses and fire places Heat absorbers and reflectors	Describes convection in kitchens, fire devices and houses. Describes the mode of reflection and absorption of heat.	Recites a poem about convection. Writes the given text about convectional currents correctly	Demonstration Observation Explanation Discussion Excursion	Discussing the use of ventilation in our daily activities.	Appreciation Being open Problem solving Creative thinking Critical thinking Articulation	MK bk 5 Comprehensive sci Bk 5 Personal collection	Charts showing convectional currents in in day-to-day activities	
	6			<u>Conductors and insulators of heat</u> What they are Examples and uses of conductors	Defines conductors and insulators of heat Describes the application of conductors	Writes and reads notes about conduction and insulation of heat correctly.	Experimentation Observation Discussion Guided discovery	Identifying conductors and insulators of heat Discussing uses of conductors and insulators of heat	Responsibility Problem solving Concern Audibility	MK bk 5 Comprehensive sci Bk 5	Water Ice Heater Wire gauze Test tubes	

				and insulators in everyday life An experiment to show that water is a poor conductor of heat.	and insulators of heat in our daily activities.				Creative thinking Critical thinking	Personal collection		
5.	1.			<u>Vacuum flask (thermos flask)</u> Its function Parts of a vacuum flask and it works Care for a thermos flask	Discusses the use of a vacuum flask Explains how a vacuum prevents heat loss and gain Tells how we can care for vacuum flasks	Draws and names parts of a vacuum flask correctly	Observation Discussion Guided discovery	Discussing the vacuum flask prevents heat loss and gain. Drawing and naming the parts of a vacuum flask	Appreciation Problem solving Care Responsibility Logical thinking	MK bk 5 Comprehensive sci Bk 5 Personal collection	A vacuum flask A chart showing a vacuum flask	

	2 & 3			<u>Expansion and contraction</u> Expansion in solids, liquids and gases. Prevention of effects of expansion and contraction	Carries out experiments to show expansion and contraction in all states of matter. Discusses how to prevent the bad effects of expansion and contraction	Writes notes about contraction and expansion Draws diagrams showing expansion and contraction (experiment)	Experimentation Observation Explanation Guided discovery	Discussing application of expansion and contraction in day-to-day life. Explaining the ways of preventing the negative effects of expansion and contraction	Problem solving Care Concern Confidence Creative thinking Critical thinking	MK bk 5 Comprehensive sci Bk 5 Personal collection	Balloons Empty bottle Bimetallic strips Soda bottle	
	4.			<u>Temperature and thermometers</u> What is temperature Temperature scales	Discusses the measures of temperature Describes the types of thermometers and their uses	Draws and names the types of thermometers Reads and writes words about thermometers	Demonstration Observation Class discussion	Naming types of thermometers Discussing the uses of thermometers	Appreciation Problem solving Decision making	MK bk 5 Comprehensive sci Bk 5 Personal	Charts showing types of thermometers	

				Types of thermometers and their uses Thermometer liquids	Identifies liquids used in thermometers					collection		
	5.			<u>Conversion of temperature scales</u> Changing from centigrade to Fahrenheit scale Changing from Fahrenheit to centigrade scale	Calculates and converts temperature from centigrade to Fahrenheit scale and vice versa	Writes and recites formulae correctly	Explanation Inquiry	Converting from centigrade to Fahrenheit scale and vice versa	Appreciation Patience Care Critical thinking Logic	MK bk 5 Comprehensive sci Bk 5 Personal collection	Blackboard Chalk	
	6.			**End of topic test**								

6	**MID TERM TWO EXAMINATIONS**											
7	1	**SCIENCE IN HUMA ACTIVITIES AND ACCUPATIONS**	**GRORowING CROPS**	<u>Planning a school garden</u> A nursery bed Caring for seedlings (transplanting, watering, hardening off etc.)	Discusses the factors to consider when siting a school garden. Shares information about the importance of a school garden to the school and the nearby community',	Writes and reads words about crops. Recites a poem about crop growing. Writes the given notes about crop growing correctly.	Whole class discussion Guided discovery Excursion Field work	Making nursery beds And caring for them	Care Appreciation Logic Concern Responsibility Creative thinking Critical thinking	MK bk 5 Comprehensive sci Bk 5 Personal collection	Hoes Seeds Mulches Water	
7	2 & 3			<u>Types of tuber crops</u> Stem tubers and root tubers	Names the types of tuber crops Describes how stem tubers are	Discusses the processes of growing stem tubers Writes and reads words	Class discussion Guided discovery Observation	Naming stem tubers Discussing the steps followed when growing tuber crops.	Care Appreciation Logic Concern	MK bk 5 Comprehensive sci	White yams Coco yams	

				Meaning and examples of stem tubers Planting and harvesting stem tubers Care for stem tubers (pest)	grown and harvested Explains how to care for stem tubers	and sentences about stem tubers correctly. Draws diagrams showing stem tubers		Explaining how to manage crop pests in stem tubers.	Responsibility Creative thinking Critical thinking	Bk 5 Personal collection		
7	4 & 5			<u>Root tubers</u> Meaning of root tubers. Examples of root tubers Planting, growing, and	Tells the meaning root tubers. Mentions the examples of root tubers. Explaining how different	Spells, pronounces, reads and writes words and sentences about root tubers e.g. cassava, sweet potatoes, turnips, carrots,	Observation Class discussion Excursion Guided discovery Think pair and share	Planting root tubers Discussing how manage and prevent root tuber pests. Explaining how to preserve root tubers.	Fluency Articulation Care Appreciation Logic Concern	MK bk 5 Comprehensive sci Bk 5 Personal collection	Cassava Sweet potatoes Carrots Turnips Charts showing root tubers.	

				harvesting root tubers. Caring for root tubers.	root tubers are grown. Explains how to crop pests in root tubers.	white flies etc. Draws and names different examples of root tubers.	Experimentation		Responsibility Creative thinking Critical thinking			
7	6			<u>Processing and storing tuber crops</u> Meaning of processing Ways of storing tuber crops,	Draws and labels the storage facilities for tuber crops. Discusses the conditions under which	Draws and labels the storage facilities for tuber crops. Spells, pronounces, reads and writes words and	Observation Class discussion Experimentation	Naming modern and traditional stores Discussing Was of caring for tuber crops in stores.	Fluency Articulation Care Appreciation Logic Concern	MK bk 5 Comprehensive sci Bk 5 Personal	Flash cards Dried cassava	

				Storage facilities for tuber crops. Reasons for storing harvested tuber crops.	tuber crops are stored. Explains the ways of preserving tuber crops.	sentences about root tubers e.g. cassava, sweet potatoes, turnips, carrots, white flies etc.		Drawing and naming different storage facilities.	Responsibility Creative thinking Critical thinking	collection		
8	1 & 2			<u>science oriented clubs in our school</u> What they are. Aims and roles (functions) Marketing (cooperative societies)	Identifies the science oriented clubs in schools Describes the roles of the science-oriented clubs in schools. Develops knowledge about farm records	Draws and labels the storage facilities for tuber crops. Spells, pronounces, reads and writes words and sentences about root tubers e.g. cassava, sweet potatoes,	Observation Class discussion Excursion Guided discovery Think pair and share Experimentation	Naming the science oriented clubs Describing their roles in school	Fluency Articulation Care Appreciation Logic Concern Responsibility Creative thinking	MK bk 5 Comprehensive sci Bk 5 Personal collection	Books of records Resource persons	

				Farm records		turnips, yams, irish potatoes carrots, white flies etc.			Critical thinking			
8	3			**END OF TOPIC TEST**								

8	4	**THE WORLD OF LIVING THINHGS**	**BACTERIA AND FUNGI**	<u>Bacteria kingdom or kingdom monera</u> Review the kingdoms of living things. Characteristics of bacteria Types of bacteria according to their shapes ie ***cocci bacteria***	Names the groups of living things Describes the characteristic of bacteria Identifies the types of bacteria of different shapes Draws and names different types of cocci or spherical bacteria.	Reads, pronounces and writes the new words about bacteria correctly e.g. ***bacteria, monera, kingdom, cocci, cylindrical, spirilla, spirochaete, streptococci, diplococci, staphylococci*** etc.	Explanation Class discussion Observation Story telling	Naming the examples of cocci bacteria Discussing the characteristics of bacteria Drawing the examples of cocci bacteria.	Effective communication Copying with stress Logic Concern Creative thinking Critical thinking Care Taking decisions Fluency Sympathy	MK bk 5 Comprehensive sci Bk 5 Personal collection	Charts showing types of bacteria Flash cards	

8	5			<u>Types of bacteria</u> Rod shaped bacteria Comma bacteria Spirilla bacteria	Names the types of bacteria Draws diagrams showing different types of bacteria	Reads, pronounces and writes the new words about bacteria correctly e.g. bacillus anthracis, salmonella typhi, treponema pallidum etc.	Explanation Class discussion Observation	Drawing shapes of different types of bacteria.	Effective communication Copying with stress Logic Concern Creative thinking Critical thinking Care	MK bk 5 Comprehensive sci Bk 5 Personal collection	Charts showing types of bacteria Flash cards	
8	6			The typical bacterium Diagram of a bacterium cell Functions of the parts	Draws and labels a typical bacterium. Discusses the uses of different parts e.g. the flagellum.	Draws and labels a typical bacterium.	Explanation Class discussion Observation	Drawing and naming the parts of a bacterium cell.	Copying with stress Logic Concern Creative thinking	MK bk 5 Comprehensive sci Bk 5 Personal	A chart showing a bacterium cell. Flash cards	

									Critical thinking Care	collection		
9	1			<u>Breeding in bacteria</u> Where bacteria live Where bacteria breed from How bacteria reproduce Factors that favour the multiplication of bacteria	Names the places where bacteria live Describes the reproduction in bacteria Relates reproduction in bacteria to that of other organisms like amoebae Explains the conditions necessary for reproduction in bacteria	Draws a diagram showing binary fission in bacteria. Reads brief notes about bacteria correctly.	Explanation Class discussion Observation	Drawing diagrams showing binary fission Discussing the mode of reproduction in bacteria	Effective communication Copying with stress Logic Concern Creative thinking Critical thinking Care Taking decisions Fluency Sympathy	MK bk 5 Comprehensive sci Bk 5 Personal collection	A chart showing binary fission in bacteria Flash cards	

9	2			<u>Nature of bacteria</u> Useful and harmful bacteria Importance of useful or harmless bacteria Dangers of harmful bacteria Bacterial diseases in plants and animals or livestock	Discusses the uses of harmless bacteria Describes the dangers of harmful bacteria Names the bacterial infections in plants and animals	Reads short stories, words, notes and facts about bacteria correctly.	Story telling Class discussion Guided discovery Explanation	Naming diseases caused by bacteria to animals and plants Discussing the uses of some bacteria in the environment. Explaining the different ways of managing bacterial infections.	Effective communication Copying with stress Logic Concern Creative thinking Critical thinking Care Taking decisions Fluency Sympathy	MK bk 5 Comprehensive sci Bk 5 Personal collection	Diseased tubers of plants Flash cards	

9	3 - 4			<u>Fungi</u> Meaning of fungi Examples of fungi ie useful and harmful fungi. Examples of useful fungi ie mushrooms, penicillium moulds and yeast Reproduction in fungi	Defines fungi. Identifies the examples of useful fungi Draws diagrams showing useful fungi.	Draws and labels the diagram of a mushroom Reads, pronounces and writes the new vocabulary correctly eg. Fungus, fungi, mushroom, penicillium, moulds, yeast, spores, budding etc.	Observation Guided discovery Explanation Class discussion	Naming the useful fungi Drawing and labelling the diagram of a mushroom Discussing the various ways some fungi are useful in our environment Describing the reproduction in yeast and other fungi	Effective communication Copying with stress Logic Concern Creative thinking Critical thinking Care Taking decisions Fluency Sympathy	MK bk 5 Comprehensive sci Bk 5 Personal collection	Mushroom Bread with moulds Charts showing useful fungi Flash cards	

9	5			<u>Harmful fungi</u> Moulds Toadstools puffballs fungal diseases	Names the examples of harmful fungi Describes the dangers of harmful fungi Names the fungal diseases in plants and animals	Draws and names the harmful fungi Reads the new words like moulds, toadstools, puffballs, bracket fungi correctly	Observation Explanation Class discussion Guided discovery	Drawing diagrams of harmful fungi Naming the fungal infections in plants and animals Discussing the ways of preventing, treating or controlling fungal diseases	Effective communication Copying with stress Logic Concern Creative thinking	MK bk 5 Comprehensive sci Bk 5 Personal collection	Charts Flash cards	
9	6			<u>Facts about bacteria and fungi</u> Similarities between bacteria and fungi Differences between	Discusses the Similarities between bacteria and fungi Discusses the Differences between	Reads short notes about bacteria and fungi Reads some facts about the great scientists	Explanation Guided discovery	Explaning the Similarities between bacteria and fungi Discussing the Differences between bacteria and fungi	Logic Concern Creative thinking Critical thinking Care	MK bk 5 Comprehensive sci Bk 5 Personal collection		

				bacteria and fungi	bacteria and fungi				Taking decisions Fluency			

REVISION BEGINS

COMPILED BY TIKYILYA SHABAN FROM TWINKLE JUNIOR SCHOOL JINJA MUTAI

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