




### **SCIENCE SCHEME OF WORK FOR TERM ONE PRIMARY THREE**


***LO: The child appreciates environmental changes and applies the acquired knowledge and skills to manage the environment.***

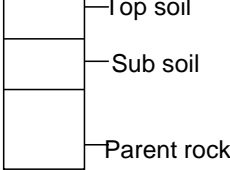
W K	P D	THEM E	S.THEM E	CONTENT	COMPETENCES	MTHD/ TECH	IND. OF L. SKILLS & VALUES	ACTIVIT Y	T/L AIDS	REF	R E F
1	1	COMP ONEN TS OF THE ENVIR ONME NT	OUR ENVIRO NMENT	Definition man and his surroundings. - Components of the environment. animals, plants, water land and air. - Groups of things in the environment. - Living things - Non living things.	The learner; - defines the term environment - lists down any four components of the environment. - mentions the two groups of things in the environment.	Field work  Guided discussion on think pair and share	effective communication self awareness responsibility	Defining Listing Naming	The school environment	Comprehensive primary science book 3 page 1	
	2		Living things	Definition of living things. Examples of living things Characteristics of living things *move *respire *excrete *reproduce e.t.c	The learner; - defines living things - gives atleast six examples of living things. - states atleast two x-tics of living things.	Explanation  Discussion	responsibility critical thinking patience	Listing Identifying	Chalkboard illustration	Introduction to Biology page 9	
	3		Classification of living things	Living things are classified into 5 groups namely: - Animals - Fungi - Plants - Monera	The learner; - mentions the 5 groups of living things.	Explanation Discovery	responsibility critical thinking	Identifying Naming	A mushroom	Introduction to Biology page 6	

				- Protoctista Examples of plants, animals and fungi Diagram of a mushroom	- gives atleast 3 examples of plants, animals and fungi.	Discuss ion			Differen t plants		
	4		Animal habitats	Definition of habitat A habitat is a natural home for living things. Animals habitats Are places where animals live e.g. water, bush, homes, swamps e.t.c. Animals in the school compound.	The learner; - defines a habitat - tells what animal habitat are - gives atleast 4 examples of animal habitats.	Guided discussi on Brain stormin g think pair & share	responsi bility critical thinking	Defining Listing Naming Drawing		Understan ding integrated science book 3 page 1	
	5			<b>Animals found in the gardens.</b> (animal pests) e.g. birds, squirrels etc. <b><u>Animals found in homes</u></b> (domestic animals) e.g. cats, dogs, cows, pigs, hens, turkey, e.t.c	The learner; - defines pests and domestic animals - gives atleast four animal pest and domestic animals.		creative thinking problem solving			Understan ding Inter. Science book 3 page 2-3	
	6			<b>Animals in the forest.</b> Lions, snakes, elephants, tigers, leopards e.t.c <b>Animals in swamps and water (Aquatic)</b> - crocodiles - crested crane - snakes e.t.c	The learner; - names four animals that live in forests and water bodies.	Explan ation  Discuss ion	creative thinking problem solving	Listing Identifyin g	Models of animals  Chalkb oard illustrati on	Understan ding Inter. Science book 3 page 3-4	
	7		Parts of the fish	<b><u>Naming the different parts of a fish</u></b>  a – mouth    b – gill cover c – pelvic fin	The learner; - draws and name the parts of a fish.	Explan ation  Discuss ion	cooperati on	Naming Drawing Identifyin g	A chart showin g fish parts.  A real fish	Comprehe nsive science book 3 page 5	

2	1		Uses of each part of a fish	Mouth – used for feeding Gill cover – protects the gills Gills – used for breathing Nostril – is used for smelling Scales – for protection	The learner; - names any five parts of a fish and give their functions.	Explanation  Observation	decision making	Give the function of each part of a fish	A chart showing fish parts.  Real fish	Comprehensive science book 3 page 5	
	2		Uses and preservation of fish	<b>Uses of fish</b> - source of food - source of income - source of medicine - used to make animal feeds e.t.c. Preservation of fish - smoking - salting - tinning/canning etc..	The learner; - gives four uses of fish - states any 3 ways of preserving fish	Guided discussion		Identifying Listing	Chalkboard illustration		
	3		Plants and their habitats	- water - wetlands - school garden - dry rocks Examples of plants that grow on water & wetlands. e.g. water lily	The learner; - identifies any three plant habitats. - names any two plants that grow in water and wetlands.	Field trips  Observation think pair & share	problem solving creative thinking responsibility concern	Identifying Listing Naming	Natural environment	Comprehensive science book 3 page 6-7	
	4		School garden	<b><u>Crops grown in the school garden. e.g. bananas, maize</u></b> <b><u>Importance of a school garden</u></b> *source of food *source of income *source of employment *used for study purposes Requirements for setting up a good school garden	The learner; - mentions any 5 crops grown in the school garden. - gives 4 uses of a school garden	Discussion  Brain storming	problem solving creative thinking responsibility concern	Naming Listing Identifying	School garden swamp	Comprehensive science book 3 page 37	

	5		Plants that grow on rocks and deserts.	<b>EXAMPLES</b> liver worts, lichens, cactus plants <b>Uses of rocks</b> - contain valuable minerals - used in construction - used in decoration etc.. Plants that are grown on different soil Clay soil – rice Dry sand – cactus Loam soil – bananas, beans, maize	The learner; - mentions one plant that grows on rocks. - gives any 4 uses of rocks to man - mention atleast one crop grown on each type of soil.	Explanation  Discussion  Brain storming  Discussion	problem solving creative thinking responsibility concern	Identifying  Listing	The environment	Comprehensive science book 5, 6, 7 page 148	
	6		Uses of plants to people	<b>Uses of plants to man</b> - source of food - source of medicine - source of income - some plant stems and wood are used for constructions e.t.c.	The learner; - gives atleast 4 uses of plants to man.	Guided discussion  Explanation	problem solving creative thinking responsibility concern	Listing Identifying	Real plants e.g. mangoes	Comprehensive science book 3 page 8	
	7		Uses of animals to people	<b>Uses of animals to people</b> - source of food - source of income - some are used for transport - some are used for protection - some are kept as pets	The learner; - gives any five uses of animals to people.	Discussion  Question & answer	problem solving creative thinking responsibility concern	Listing Identifying	Chalkboard illustration	Comprehensive science book page 8	
3	1 & 2	OUR ENVIRONMENT	<b>SOIL</b> Components of soil	<b>Definition of soil</b> Formation of soil (weathering & decomposition) Components of soil - humus - water - living things e.t.c. air, mineral matter	The learner; - defines soil - tells how soil is formed - states any four components of soil.	Explanation  Discussions	responsibility creative thinking logical thinking	Defining Listing Identifying	Soil	Comprehensive science book 3 page 9	

3	OUR SUB COUN TY	Experim ents about compon ents of soil	Experiments to show that soil contains air. Apparatus - soil sample - water - beaker/bucket    Bubbles form to show soil contains air.	The learner; - identifies the materials used to show that soil contains air.	Explan ation  Demon stration  Observ ation	responsi bility creative thinking logical thinking	Drawing  Observin g	Soil Water Beaker s	Understan ding Inte. Science book 3 page 18	
4			Experiments to show soil contains water. Apparatus - sample of soil - stove - saucepan - cover/lid	The learner; - states the materials used to test for water in the soil.	Demon stration  Observ ation	responsi bility creative thinking logical thinking	Observin g	Soil Saucepan Stove, a lid	Understan ding Inte. Science book 3 page 17	
5	ENVIR ONME NT IN OUR SUB COUN TY	TYPES OF SOIL & TEXTU RE	Sand soil Clay soil etc.. Sand soil properties - Has big properties - Water passes through fast - Dries up quickly <u>Uses of sand soil</u> - building - ceramics	The learner; - states two properties of sandy soil. - gives two uses of sandy soil.	Explan ation  Discuss ion	responsi bility creative thinking logical thinking	Observin g  Identifyin g	Soil sample s	Comp. guide to science page 129	
6		X-tics of clay soil	<b>Clay soil</b> - Has small and fine particles - Contain very little air - Holds water for long. <u>Uses of clay soil.</u> - pottery	The learner; - states any two properties of clay soil. - identifies any two uses of clay soil.	Observ ation  Illustrati on	responsi bility creative thinking logical thinking	Listing  Naming Modeling simple products	Soil sample s Product s from clay soil	Understan ding inter sci book 3 page 20	
7		X-tics of loam soil	<b>Loam soil</b> - Well drained - Well aerated - Are fertile and contain humus	The learner; - gives any two properties of clay soil.	Explan ation  Discuss ion	responsi bility creative thinking	Observin g  Identifyin g	Soil sample s		

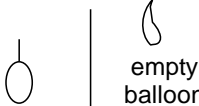
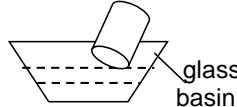
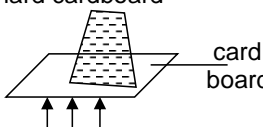
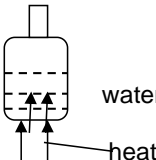
				Uses of loam soil. - agriculture	- states the major use of loam soil.		logical thinking				
4	1		Experiment for soil properties	<b>Experiment to show the properties of soil.</b> (Soil drainage) Apparatus - soil samples - beakers - funnels - funnels - water - filter paper	The learner; - tells which type of soil holds water for long.	Observation  Illustration	responsibility creative thinking logical thinking	Listing  Naming	Soil samples, water, filter paper, funnels	Understanding inter sci book 3 page 20	
	2		Soil profile	Definition of soil profile and texture. A cross section of soil profile. 	The learner; - defines soil profile and texture. - identifies the layers of a soil profile.	Explanation Illustration  Field work	responsibility creative thinking logical thinking	Drawing Naming Identifying	Cut section of soil at road side	Comp. sci book 3 page 11	
	3		Uses of soil	- used for planting - used for construction - used for modelling brick making - some soil is used for painting	The learner; - gives any four uses of soil to man.	Guided discussion  brain storming	responsibility creative thinking logical thinking	Listing	Chalkboard illustration	Comp. sci book 3 page 13	
	4 & 5		Soil erosion	<b>Definition of soil erosion</b> - agents - causes of soil erosion - deforestation - over grazing - over cultivation - bush burning	The learner; - defines soil erosion - states any three causes of soil erosion	Explanation Question & answer	responsibility creative thinking logical thinking	Defining Listing	Chalkboard illustration	Fountain Pri. Science book 5 page 70	
	6		Types of soil erosion	<b>Types of soil erosion</b> Sheet erosion Rill erosion	The learner;	Guided discussion	responsibility	Listing	Cross section of soil	Fountain Pri. Sch	

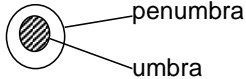
				Gully erosion River bank erosion e.t.c. Rain drop erosion	- identifies the types of soil erosion.	Discover y Demon stration Field walk	critical thinking creativity		e.g. gullies	book 5 page 70	
	7		Effects of soil erosion	Loss of soil fertility Causes siltation Reduced/shortage of food Destruction of soil structure, destroy crops.	The learner; - states any two effects of soil erosion.	Explan ation  Discove ry	responsi bility critical thinking creativity	Listing	Chalkb oard illustrati on	Biology for East Africa page 223	
5	1		Methods of controlling soil erosion	Soil erosion is controlled by: - terracing - mulching - contour ploughing - strip cropping - inter cropping e.t.c.	The learner; - gives ways of controlling soil erosion	Explan ation Illustrati on think pair & share	responsi bility critical thinking creativity	Listing	Chalkb oard illustrati on	Fountain Pri. School book 5 page 76	
	2	Manag ing chang es in the enviro nment	Types of changes in the environment	Natural and man-made changes in the environment. - Natural changes are changes that occur on their own. e.g. earthquakes, volcanic eruptions, floods etc. - Manmade changes and examples.	The learner; - defines natural and manmade changes - gives at least 4 examples of natural and manmade changes.	Discove ry  Explan ation	responsi bility critical thinking creativity	Identifyin g Listing Naming	The environ ment	Comp. science book 3 page 57	
	3 & 4		Good and bad changes in the environment.	<b>Good changes</b> - growth - afforestation - farming - building wells <b>Bad changes</b> - deforestation - swamp drainage - over fishing e.t.c - bush burning	The learner; - identifies any two good and bad changes in the environment.	Brain stormin g  Discove ry	responsi bility critical thinking creativity	Naming Listing	E learnin g  The environ ment	Comp. science book 3 page 57	

				Effects of bad changes in the environment Uses of good changes in the environment Ways of managing changes in the environment							
5 & 6	Managing changes in the environment	Weather	<b>Definition</b> The state of the atmosphere at a given time in a place. <b>Types of weather</b> windy, sunny, rainy, and cloudy <b>Elements of weather</b> rainfall, cloud cover, temperature	The learner; - mentions the types of weather - mentions the elements of weather	Think pair and share  Explanation	Logical thinking  Critical thinking	Defining  Observing  Mentioning	A chart showing types of weather  Local environment	Curr-guide book 3  Mk Int. SST 3 & 4  Int. Science bk 3		
7		Weather instruments and uses	<b>Examples of weather instruments</b> e.g. wind vane, rain gauge etc. <b>uses of each instrument</b>	i)identifies the different weather instruments. Is)states the use of each weather instrument.	Think pair and share  Explanation	Logical thinking  Critical thinking	Defining  Observing  Mentioning	A chart showing types of weather  Local environment E learning	Curr-guide book 3  Mk Int. SST 3 & 4  Int. Science bk 3		
6	1		The sun <b>The sun</b> It is a natural source of heat and light energy. <b>Uses of the sun</b> - provides heat and light energy - provides sunshine to dry harvested crops - source of vitamin D	The learner, i)describe the sun ii)gives uses of the sun	Guided discussion  Brain storming	Logical thinking  appreciation	discussing	The environment	MK INT SST bk 4		



	2			<b>Effects of the sun</b> - leads to drought - too much sunshine dry harvested crops - too much sunshine dry water bodies etc..	The learner; - states the effects of too much sunshine in the environment	Explanation  Discussion	Logical thinking	Mentioning	Local environment		
<b>E.L.O: The child appreciates and conserves the environment.</b>											
	3	ENVIRONMENT & WEATHER IN	AIR	Definition of air <b>Components of air</b> - Nitrogen 78% - Oxygen 21% - Carbon dioxide 0.03% - Rare gases 0.97% or 1%	The learner; - defines air - mentions any four components of air.	Explanation  Discovery	patience social awareness decision making	Identifying Listing	Text books		
	4  5	OUR SUBCOUNTRY	Uses air	<b>Nitrogen</b> – used by plants to make plant proteins. <b>Oxygen</b> – used in respiration, burning and rusting. <b>Carbon dioxide</b> used in fire extinguishers, photosynthesis, preservation of soft drinks. <b>Rare gases</b> – used in bulbs Experiment to show that oxygen supports burning.	The learner; - gives least one use of each gas in air.	Explanation  Discovery think pair & share	patience social awareness decision making	Identifying Listing Naming Observing	Fire extinguishers  Bulbs	Comp. science book 3 page 14	
	6  &		Properties of air	Air has weight Air occupies space Air exerts pressure Air can be compressed  <u><b>Experiment to show Air has weight</b></u>	The learner; - gives any two properties of air	Experimentation	patience	Observing   Listing	A balloon string	Comp. science book 3 page 15	

	7		Experiments on properties of air.	 <p>balloon with air</p> <p>empty balloon</p> <p><b><u>Experiment to show Air occupies space</u></b></p>  <p>glass basin</p>		Explanation	social awareness	Drawing	A beam balance Water Container glass		
7	1 & 2		<p><b><u>Experiment to show Air exerts pressure</u></b></p> <p>Apparatus</p> <ul style="list-style-type: none"><li>- glasses</li><li>- water</li><li>- hard cardboard</li></ul>  <p>card board</p>	The learner; - carries out the experiment.	Experimentation	patience social awareness decision making	Observing Drawing	Hard cardboard, water, glass	Comp. science book 3 page 18		
			<p><b><u>Experiment to show that air can be compressed.</u></b></p>  <p>water</p> <p>heat</p> <p>Air pressure outside the tin compresses air inside the tin.. Air can be compressed.</p>	The learner; - carries out the experiment.	Experimentation	patience social awareness decision making	Observing Drawing	Ballon A tin Water	Comp. science book 3 page 18		

	3			Air supports burning (oxygen) An experiment to show that oxygen supports burning.		Discussion		Identifying Listing	Chalkboard illustration		
	4		The planet	The planet (jupiter, mars) Phases of the moon  <b>Types of objects</b> Opaque, transparent, translucent	The learner; - identifies examples of planets - describes phases of the moon.	Discussion	creative thinking  self awareness	Identifying Listing	Chalkboard illustration	Understanding inte. Science book 3 page 24	
	5 & 6		Shadow	<b>Definition</b> <b>Formation of shadows</b> - shadows are formed when light is blocked by an opaque object. - they are formed opposite the source of the light. <b>(Diagrams)</b> <b>Parts of a shadow</b> <b>Umbra</b>  Uses of shadows	The learner; - tells how shadows are formed. - tells when shadows are long or short.	Demonstration  Explanation	creative thinking  self awareness	Observing	The sun  Torch candle	Comp. science book 3 page 23-24	
	7		Clouds	<b>Types of clouds</b> - nimbus clouds - cirrus clouds - stratus clouds - cumulus clouds (near the earth)	The learner; - lists down the different types of clouds. - states any two uses of clouds to man.	Explanation  Observation	creative thinking self awareness	Observing Listing Identifying	Clouds in the sky.  E learning	Comp. science book 3 page 25-26	
8	1			<b>Uses of clouds</b> - help in rain formation - protect us from direct sun rays. - keep the earth warm.	The learner; - tells the uses of clouds.	Brain storming	critical thinking problem solving mobility	discussing			

				<ul style="list-style-type: none"> <li>- cause change in temperature.</li> </ul> <b><u>Dangers of clouds</u></b> <ul style="list-style-type: none"> <li>- Hailstorms, lightening .</li> </ul> Storms cause planes to crash.		Think,p air,and share					
	2 & 3	Changes in the environment	Rainfall	<b><u>Formation of rainfall (water cycle)</u></b>  <b><u>Experiment to show the rain cycle.</u></b> Apparatus - stove      - water - bottle      - matchbox	The learner; - identifies the two processes involved in rain formation	Explanation  Illustration  Experimentation	critical thinking problem solving mobility	Observing	Store, water, bottle, matchbox	Comp. science book 3 page 26	
	4		Uses of rainfall	<ul style="list-style-type: none"> <li>- softens soil for cultivation</li> <li>- increases on the water level of water bodies</li> <li>- provides water for domestic use.</li> </ul>	The learner; - gives the uses of rain to man.	Guided discussion	critical thinking problem solving mobility	Listing Identifying	Chalkboard illustration	Comp. science book 3 page 27	
	5		Dangers of rainfall	<b><u>Dangers of rainfall</u></b> <ul style="list-style-type: none"> <li>- causes crops to rot</li> <li>- causes floods</li> <li>- leads to easy spread of water borne diseases</li> <li>- causes soil erosion</li> </ul>	The learner; - states any four dangers of too much rainfall.	Guided discussion	critical thinking problem solving mobility	Listing Identifying	Chalkboard illustration	Understanding int. science book 3 page 33	
	6		Sources of water	<b><u>Sources of water</u></b> <ul style="list-style-type: none"> <li>- Natural sources</li> <li>- Artificial sources</li> </ul> <b><u>Natural sources</u></b> <ul style="list-style-type: none"> <li>- rain      - streams</li> <li>- lakes      - seas</li> <li>- wells      - oceans</li> </ul> <b><u>Artificial sources</u></b> <ul style="list-style-type: none"> <li>- protected wells</li> <li>- bore holes</li> </ul>	The learner; - tells the main natural source of water - names any two natural and artificial source of water. - identifies ways of harvesting water	Inquiry  Discussion  Explanation	critical thinking problem solving mobility	Identifying Naming Listing Drawing	Nearby water sources	Understanding int. science book 3 page 33	
	7			<b><u>Ways of harvesting water</u></b> <ul style="list-style-type: none"> <li>- using tanks</li> <li>- using water gutters etc...</li> </ul>			critical thinking				

				<b><u>Materials used to harvest water</u></b> - basins, tanks & pots.etc Caring for water sources - fencing water sources - repairing water sources - avoid directing sewages in water sources. Uses of water to; i) man/animals			problem solving mobility				
<b><i>ELO The child demonstrates knowledge and skills of preventing common diseases and controlling them for a health life.</i></b>											
9	1	HEALTH IN OUR SUB COUNTRY	Sanitation	<b><u>Definition of sanitation</u></b> Elements of sanitation - personal hygiene - safe storage of food - proper disposal of rubbish - proper disposal of human waste	The learner; - defines sanitation - identify any four elements of sanitation	Explanation  Discovery	critical thinking problem solving mobility	Defining Mentioning Identifying Listing	Dustbins, soap, clean, water	Comp science book 3 page 28	
	2			<b><u>Requirements of a clean home and their importance</u></b> - a latrine/toilet - a rubbish pit - a food store - a plate stand - bathroom	The learner; - mentions any four requirements of a clean home and their importance.	Guided discussion  Discovery	critical thinking problem solving mobility	Listing Identifying	School environment	Int. science book 3 page 40	
	3		Proper sanitation	<b><u>Definition of proper sanitation</u></b> Importance of proper sanitation Ways of proper sanitation - keepign the toilets clean - proper disposal of rubbish	The learner; - defines proper sanitation - gives at least one use of proper sanitation - identifies ways of having proper sanitation	Explanation	critical thinking problem solving mobility	Defining Listing	Text books		

4		Personal hygiene	<p><b><u>Definition of personal hygiene</u></b>          Ways of promoting personal hygiene          - bathing regularly          - brushing teeth after every meal.</p> <p>Things used in promoting personal hygiene.</p>	<p>The learner;          - defines personal hygiene          - gives two ways of promoting personal hygiene.</p>	<p>Question &amp; answer</p> <p>Explanation</p>	<p>responsibility          creativity          patience          care          self awareness</p>	<p>Defining          Identifying          Listing</p>	<p>soap, water, tooth paste, tooth brush, sponge</p>	<p>Supplementary sci. book 5 page 119</p> <p>Comp. science bk 3 pg 93</p>	
5		Food hygiene and contamination	<p><b><u>Definition of food hygiene and contamination.</u></b>          Ways food get contaminated.          e.g          * serving with dirty hands and containers.          * serving in dirty containers.          * leaving it uncovered.</p>	<p>The learner;          - defines food hygiene and contamination          - gives two ways food is contaminated.</p>	<p>Explanation</p> <p>Guided discussion</p>	<p>responsibility          creativity          patience          care          self awareness</p>	<p>Defining          Listing</p>	<p>Chalkboard illustration</p>	<p>Comp. science book 3 page 97</p>	
6		Food preservation and storage	<p><b><u>Define food preservation</u></b>  <b><u>Ways of preserving food.</u></b>          * sun drying          * smoking etc..          Reasons why food is preserved.  <b><u>Storage of food</u></b>          - using local granaries          - using silos          - a structure of a local granary</p>	<p>The learner;          - defines food preservation          - identifies reasons for preserving food.</p>	<p>Explanation</p> <p>Guided discussion</p>	<p>responsibility          creativity          patience          care          self awareness</p>	<p>Identifying          Listing</p>	<p>Preserved food</p>	<p>Comp. science book 3 page 97</p>	