P.5 INTEGRATED SCIENCE SCHEME OF WORK TERM II

WK	PD	THEME	TOPIC	SUB – TOPIC	SUBJECT COMPETENCES	LANGUAGE COMPETENCES	CONTENT	MTDS	LIFE SKILLS & VALUES	ACTS	T/ L AIDS	REF	REM
1	**1**	**The**	**soil**	**soil**	The Learners; - Defines soil - States the importanc e of soil - Gives the importanc e of soil to crops - States organisms that live in soil	Learner; reads, spells, pronounces, describes and uses key words in the sentences correctly. - ceramics - pottery - aeration	- Soil - Description of soil - Importance of soil to crops - Importance of soil to man - Organisms in the soil - Methods of soil formation - Composition /parts of soil	Qn and answer (tech)	Skills Effective communication I.e. Fluency Audibility accuracy	Reciting and describing key words (content)	Samples of soil the local environment	Baroque bks pgs 61-63	

	2	**Environment**	**soil**	**Components of soil**	- State the importance of each soil - Performs experiments to show that soil contains air, water and humus	- Decompose/ rot or decay - dissolve	- importance of each part of soil (components) - importance of humus in the soil - how humus is formed - importance of water in the soil - description of air - importance of air in the soil	Guided discovery	Value I.e. Concern Care Responsibility Doing written exercise	Taking note		Mk bks Pgs 165-169	
2	**1**			**practicals**		-	- Practicals - An experiment to show that soil contains air - An experiment to show that soil contains water - An experiment to show that soil contains humus	demonstration		Performing experiments on each component of soil	·	Integrated sci guide upper pgs 72	

2	**2**			**Types of soil**	- State each type of soil - Give the properties of each type of soil - Identifies the uses of each type of soil	- Drained - Aeration - capillarity	- types of soil - description of soil structure - types of soils as clay, loam and sandy soil - properties of loam soil - arrangemen t of particles in loam soil			-			
2	**3**	**The enviro nment**	**soil**	**Properti es and uses of each type of soil**	The learner; - States the properties of clay and sandy soil - Gives the uses of clay and sandy soil	Learners; reads, spells -drained -aerated -capillarity	- Uses of loam soil - Properties of clay soil - Arrangemen t of particles in sandy soil - Uses of sandy soil		Skills Effective communication I.e. -fluency -audibility	- Nature walks around the environ ment.	Samples of soil	Integrated sci bk upper pgs 74-75	
	4	**The enviro nment**	**soil**	**Soil profile**	- Describes soil profile - Draws a well labeled structure of soil profile - States why top soil is good for crop growing -	- Gravel - Bed rock - Parent rock -	- **soil profile** - description of soil profile - structure of soil profile - why top soil is suitable for crop growth - pieces where we can see a soil profile	demons tration	Values -care -concern	- perform ing experim ent on soil drainag e and capillari ty	-water Funnewls -cotton wool	-baroque bk pg 64	

	5	**The environment**	**soil**	**Soil drainage and soil capillarity**	- Describes soil drainage - Describes soil capillarity	practicals	- **Practicals** - **Soil drainage** - Description of soil drainage - An experiment on soil drainage - **Soil capillarity** - Description of soil capillarity - An experiment on soil capillarity	observation		- Talking notes		Mk bks pgs 169-170	
	6			**Soil exhaustion**	**describes exhaustion** - **-state the causes of soil exhaustion**	- Bare - massive	- **soil exhaustion** - description of soil soil exhaustion - description of soil leaching - causes of soil leaching			-			

3	**1**	**The environment**	**soil**	- Soil erosion excursion	The leaner; -Describes soil erosion -States the agents and causes of soil erosion -Gives the types of soil erosion - -Gives the ways of controlling soil erosion	The learner; reads, spells, describes key words correctly Gullies Deregatation nills	**Soil erosion** -description of soil erosion -Agents of soil erosion -Causes of soil erosion -Dangers of soil erosion -Types of soil erosion -Description of each type of erosion -Ways of controlling soil erosion **Note ; excursion on erosion – Kitete- ham Mukasa valley**	observation	- **value** - **ie** - response - care	*Excursion on erosion*	*-local environment*	*-baroque **bk** pgs 88-91*	
	2	**The environment**	**soil**	Soil conservation and fertility	- describes soil conservation and fertility - states ways of maintaining soil conservation and fertility	- terraces - mulch	**Soil conservation** -Description of soil conservation Ways of maintaining soil conservation. **Soil fertility** -Description of soil fertility -Methods of maintaining soil conservation	Guided discovery	Skills -effective communication I.e. -fluency -accuracy	- Taking notes - writing - written exercise	-pictures of erosion in books	Mk bks pgs 188-189	

	3	**The environment**	**soil**	**Fertilizers (natural fertilizers)**	- states the types of fertilizer - describes each type of fertilizers - gives examples of fertilizers - gives advantages and disadvantages of natural fertilizers	-	**Fertilizers** -Description of fertility -Types of fertilizers -Description of natural fertilizers -Examples of national fertilizers -Advantages of natural fertilizers -Disadvantages of natural fertilizers			-		Integrated sci upper pgs 78-79	

3	**4 & 5**	**The environment**	**soil**	**Fertilizers(artificial)**	The Learner; - Describes artificial fertilizers - States types of artificial fertilizers - Gives examples of artificial fertilizers - State advantages of artificial fertilise - Gives methods of applying fertilizers - Identifies harmful materials and their effect in the soil	The Learner; reads, spells, describes and uses key words in sentences correctly -pesticides -pollution	**Artificial fertilizers** Description of artificial fertilizers Types of artificial fertilisers Explanation of straight fertilizers and their examples Description of compound fertilizers and their examples Advantages and disadvantages of artificial fertilizers **Methods of applying fertilizers** -dsesription of each method above **Harmful materials in the soil** **-**description of harmful materials -examples of harmful material in the soil -effects of harmful materials in the soil	Qn and answer(tech) Guided discovery demonstration	**Skills** -fluency -confidence Values -concern -care -respect	-demonstration methods of applying fertilizers Taking notes Doing written exercise Nature walk to pick those harmful materials Describing key words	-local environment.	Baroque bks pgs 93-94.	

3 4	**6 & 1**	**Matter And energy**	**Heat energy**	**matter**	--describes matter -states the properties and state of matter -gives the properties of matter -Draws the arrangement of molecules in each state	Topic 2 -molecules -atom -cohesion -adhesion	**Matter and energy** **Matter** -description of matter -Properties of matter States of matter **Solid state** **-**properties of a solid - Arrangement of molecules -examples of solids **Liquid state** -properties of a liquid arrangement of molecules			-		.	

4	**2**	**matter**	**Heat energy**	**Fertilizers(artificial)**	The Learner; - Describes artificial fertilizers - States types of artificial fertilizers - Gives examples of artificial fertilizers - State advantages of artificial fertilize - Gives methods of applying fertilizers - Identifies harmful materials and their effect in the soil	The Learner; reads, spells, describes and uses key words in sentences correctly -pesticides -pollution	In a liquid - Example of liquids - Description and examples of viscous liquids - Pressure in liquids **Gas state** **-**properties of a gas **-**molecular arrangement in a gas -Examples of gases	Guided discovery	**Skills** **-**confidence - Fluency -audibility	- Describing key words -taking notes	-candles Match box	Baroque Bks pgs 106-107	

	3	**And energy**		**Changes of state of matter**	- Recites the changes of state of matter - Identifies the processes taking place during each change of state - Describe each process above	- Vapour - Condense - Freeze - Melt - Sublimine - steam	**Changes of states of matter** -arrangement of states of matter -description of each change of state Description of each process during the change of state Illustration of each process above Boiling and freezing points of water on both scales	Qn and answer(tech)	**Values** -respect -Care -concern	- doing written exercise		-mk bks pgs 102-104	
	4			**Heat**	- describes heat - states sources of heat as natural and artificial - gives the uses of heat energy - states the effects of heat on matter	- temperature - calonmeter	**Heat** **-**description of heat - Instruments for measuring heat energy - Natural sources of heat -Artificial sources of heat -Uses of heat energy -Effects of heat on matter -Danger of heat	observation					

	5	**Matter and energy**	**Heat energy**	**Heat transfer (conduction) practical**	**The leaner,** - describes heat transfer - states the methods of heat transfer - describes each process of heat transfer - illustrates each method of heat transfer	**The learner,** Reads,specks,describes, pronounce key words -solid -melts	**heat transfer** **-**description of heat transfer -methods of heat transfer **Conduction practicals** **-**description of conduction -How conduction takes place -an experiment on conduction -uses of each component of the above experiment -application/ importance of conduction	demonstration	**Values** Ie -care -Concern responsibility	-Visit to the kitchen Performing experiment on conduction and convection Taking notes Doing written exercise	-candles -match box -nail -charcoal stone	Baroque bk5 pgs 112-116	
	6	**Matter and energy**	**Heat energy**	**Heat transfer (convection) practical**	- describes convection - describes how convection takes place in liquids and gases - states the application of convection	- denser - less dense - convection current	**Convection practicals** **-**description of convection -how convection takes place in liquids and gases -an experiment on convection in gases -importance/ application of convection	Observation Qn and answer(tech)	**Skills** **-**friendship Formation Ie -sharing -working in groups	-			

5	**1**			**Heat transfer (radiation) practical**	-describes radiation -describes how radiation occurs -states the importance of radiation	-radiant -vacuum -space -medium	**Radiation-practicals** **-**description of radiation -how radiation takes place -(examples of radiation in nature) Application / importance of radiation -speed of heat(comparison of heat transfer)	-			'		
5	**2**	**Matter And energy**	**Heat energy**	**Insulators and conductors of heat (practical)**	**The learner,** **-**defines conductors of heat -gives examples of conductor State the best conductor of heat -describes insulators -identifies examples of insulators -states the application of conductors and insulator	**The learner** reads,spells,describes key words correctly -conduct -insulate	**Conductors** **-**description of conductors -examples of conductors -best conductor of heat **Insulator** **-**description of insulators -examples of insulators -application of conductors and insulators	Guided discovery	Values -care -concern		'		

	3 & 4	**Matter And energy**	**Heat energy**	**Heat reflector and absorber**	-describes heat reflectors and absorbers -gives examples of heat reflectors and absorbers -gives application of reflectors and absorbers of heat -describes the thermos/vacuum flask -draw a well labelled thermos flask -states the function of all parts of a thermos flask	-heat loss -heat gain Increase decrease	**Heat reflectors** **-**description of heat reflectors -examples of heat reflectors **Heat absorbers** -description of heat absorbers -examples of heat absorbers -application of heat reflector and absorbers **Thermos flask(real object)** -description of thermos flask -uses of each part of a thermos flask -importance of thermos flask	Experimentation Qn and answer(tech)	**Skills** Friendship formation Ie -sharing -working in groups	Hanging wet black and white handker chief Assembling a thermos flask and studying each part	-white handkerchief and black one A thermos flask		
	5			**Expansion and contraction**	-describe expansion and contraction -performs an experiment on expansion	- Practical on expansion in gases	**Expansion** **-** description of expansion -description of contraction Structure showing expansion in solid -an experiment on expansion of gases -application of a bimetallic strip -	-			'		

5	**6**	**Matter**	**heat**	**Effects on expansion and contraction**	**The learner,** -describes the importance of gaps in a soda bottle and railway line -state the importance of sagging wires btn poles and the current ends (compensators) on pipe line	**The learner,** Reads, spells, describes key words -bursting -compensation	**Effects of expansion and contraction** -Importance of gaps in soda and beer bottles -Importance of gaps in railway lines -Importance of sagging wires btn electric and telephone poles -importance of curved ends (compensators) in pipe lines	Guided discovery inquiry	Skills -effective communicatione -accuracy -audibility **Values**ie -care -concern -responsibility	-describing key statement Taking notes Doing written exercise	Baroque bks pgs 117-118	-	

7	**1** **&** **2**	**And energy**	**Heat and energy**	**temperature**	-defines temperature -state the units and instrument for temperature -gives types of thermometers	-mercury -sterilisation -opaque	**Temperature** -description of temperature -units and instrument for measuring temperature scales -types of thermometers **The clinical thermometer** **-**description and importance of a clinical thermometer -functions of each part of a clinical thermometer -places where a clinicial thermometer is placed in the body -the normal body temperature -liquids used in the clinical thermometer -why mercury is used	-	-			'	

7	**3**	**Matter And energy**	**Heat energy**	**Temperature**	**The learner,** -gives advantages of alcohol over mercury -States the dis advantages of alcohol in thermometer -gives reasons why water is not used in thermometer -describes and draws the six's thermometer	**The learner,** reads,spells,describes key words	-Advantages of alcohol over mercury -disadvantages of alcohol in thermometers -why water is not used I n thermometer -description and structure of the six's thermometer	-guided discovery	**Skills** -problem solving I.e. -Evaluating facts -Finding different ways of doing things -making choice **-values** i.e. -Concern -Responsibility	Evaluating facts -performing experiment on burning -copying notes -answering written exercise		-baroque Bks	
	4	**Matter And energy**	**Heat energy**	**Conversions in temperature (from** 0f to 0c)	-states and recites the formula for changing temperature -works out problem involving temperature changes(from **0f to 0c)**	-	**Conversions in temperature** a) From degrees Fahrenheit to degrees Celsius (from 0f to 0c) b) From degree Celsius to degrees Fahrenheit (from 0c to 0f)	-demonstration				-	

	5	**Matter And energy**	**Heat energy**	Burning practical	-describes what burning is -perform experiments on burning -states ways of putting out petrol fire and fires	-combustion -reaction	**Burning** -description of burning -experiments on burning i.e. a) a candle with a glass. b) a candle, glass and a water container -zones of fire flames -ways of putting out fires and petrol fires					'	
7 8	**6 & 1**	**Matter And energy**	**Heat energy**	**Rusting practical**	**The learner,** -describes rusting -states condition for rusting -gives the similarities btn rusting and burning -performs an experiment on rusting -gives advantages of rusting and its dis advantages -states the ways of controlling rusting	**The learner,** Reads, spells, describes key words -enameling -galvanising	Rusting -description of rusting -description of rust -condition for rusting -similarities btn rusting and burning -an experiment on rusting -advantages of rusting -disadvantages of rusting -control of rusting	observation	**Skills** -problem solving i.e. -talking a decision -making choices Values -care -concern -responsibility	Performing experiment on rusting -performing experiment on separation of mixture -taking notes	-funnels -magnets -salt -charcoal stone -	- baro que bks pg 104- 105	

8	**2**	**Matter And energy**	**Heat energy**	**Mixtures practical**	-describes a mixture -states examples of mixtures -performs experiments on separation of mixtures	-dissolves -solute -solvent -filtrate -residue	**Mixtures** **-**description of mixtures -examples of mixtures -an experiments on separation of mixtures a)decanting b)filtration c)boing to dryness(salt from a solution) d)hand picking e)floatation f) use of a magnet					-	
	3	**Matter And energy**	**Heat energy**	**energy**	-describes energy -gives types of energy -describes and gives examples of each type of energy	-possess -gravity	**energy** **-**description of energy -types of energy -description and examples of kinetic energy -description and examples of potential energy -energy intervensions experiment. **practical**					-	
8	**4 & 5**	**Matter And energy**	**Heat energy**	**forces**	**The learner,** **-**describes what a force is -states examples of forces -describes each type of	**The learner,** **-**reads spells, describes key words correctly -motion -streamling	**Forces** **-**description of a force -examples of forces -description of friction -advantages of friction	Guided discovery	-effective communication -fluency	-describing key	-chalk board illustration	-	

					force -gives advantages disadvantages of friction -states ways of reducing and increasing friction -describes each type of inertia		-dis advantages of friction -how to increase friction -how to reduce friction -description of inertia -types of inertia -description of each type of inertia -description of up thrust or buoyancy force	Qn and answer	Values -care -concern	Statement -taking notes			
8	**6**	**The world of living things**	**Bacteria and fungi**	**bacteria**	**The learner,** **-**describes bacteria -identifies places where bacteria are found -gives the conditions for bacteria to reproduce -draws the structure of bacteria	**The learner,** Reads, spells, describes key words -binary -fission -microscope -flagellum	**Bacteria** **-**description of bacteria -places where bacteria stay -conditions needed for bacteria to reproduce (means and structure) -structure of a bacterium	Guided discovery	**Skills** -decision making i.e. -refusal -giving instruction **Values** -care -concern	Describing key words (statement) -taking notes	-chalk board illustration	Baroque bks pgs 135-139 Mk bk5 Pgs 260-262	

9	**1**	**The world of living things**	**Bacteria and fungi**	**Types of bacteria**	- Describes and draws each type of bacteria - -states the diseases caused by each type of bacteria	-vibrio -staphyloceus -streptococcus -diplococcus -treponema -	**Types of bacteria** -cocci or coccus bacteria(straphyloceccus, streptococcus) -bacillus bacteria (salmonella, bacillus authracis) -spirilla and spirachaete(treponema pallidum and vibrio cholerae					-	
	2	**The world of living things**	**Bacteria and fungi**	**Continuation of bacteria**	-state the uses/ importance of bacteria -gives the dangers of bacteria -gives the diseases caused by bacteria -states the prevention of bacteria diseases	-antibiotic -septic	- importance/ uses of bacteria(useful bacteria) -dangers /harmful bacteria -diseases caused by bacteria -prevention`					-	
9	**3**	**The world of living things**	**Bacteria and fungi**	**fungi**	**The learner,** **-**describes fungi -describes how fungi reproduce and feed -gives examples of fungi -outlines	**The learner,** **-**reads spells, describes key words correctly -saprophytes -parasites -saprophytically	**Fungi** -description of fungi -how fungi reproduce -how fungi feed -description of saprophytes -examples of fungi -importance of	-guided discovery	**Skills** -problem solving i.e. -refusal -acceptance	-Describing key -Statement -taking note	-chart showing mush room	ba ro qu e Bk s Pg s 14 1- 14	

					diseases caused by fungi		fungi -dangers of fungi -diseases caused by fungi	inquiring	**Values** -care -concern			2	
	4	**The world of living things**	**Bacteria and fungi**	**mushroom**	-describes a mushroom i.e. –how it reproduces and feeds -draws a well labelled structure of mushroom -states the similarities btn fungi and bacteria -gives differences btn fungi and bacteria		**The mushroom** -description of mushroom i.e. i) where it grows from ii) its reproduction iii) its feeding -structure of a mushroom -functions of each part of a mushroom -importance of a mushroom -similarities btn a fungi and bacteria -differences btn fungi and bacteria					-compre Bks Pgs 54-53 Mk bks pgs 266-267	