#CREATIVE PRINTERS SCIENCE SCHEME OF WORK FOR P5 TERM II 2024

K	PD	TOPIC	TOPIC	CONTENT	SUBJ.	LANG.	METHODS	ACTIVITIES	IND. OF	INST. MAT.	REF.	RE
WK	4				COMP'NCE	COMP'NCE			L.S.V			M.
					S	S						
1	1	Compone	Types of	SOIL	The	The	Guided	Defining	Appreciati	Soil	Mk.	
		nts Of	soil	\Rightarrow Soil is the top	learner;	learner;	discover	soil	-on.	sample	Int.	
		Environm		layer of the	 Defines 	1.	У				sci.	
		ent- Soil		earths'	soil.	Pronoun		XX	Care		pbk 5	
				surface.	2. States	ces,	Discussio (Stating				
				Types of soil	the types	spells,	n 👞	types of				
				Sand soil, Loam	of soil.	reads		soil.				
				soil Clay soil	3. Give the	writes			Awarenes			
				Soil formation	methods	and	observati		S			
				1. Weathering	of soil	demonst	on				Int.	
				2. Decompositio	formation	rates					sci.	
				n		meanin	V				syllab	
				Weathering		g of					us bk	
				\Rightarrow Weathering is		words					5	
				the		related			Fluency			
				breakdown of		to soil						
				large rock		e.g.					New	
				particles in to		sand,			Concern		Fount	
				small soil		loam					. Pbk	
				particles.		and					5	
				Decomposition		clay						
				⇒ Decompositio	X	2. Reads,						
				n is the		internaliz						
				breakdown of		e and						
				dead		writes						
				decaying	-	texts						
				substances		and						
				into small soil		question						
				particles.		s related						
						to soil.						

1	2	Compone	Properties	Properties of	The	The	Guided	Stating	Appreciati	Soil	Mk.
		nts of	of soil	different types of	learner;	learner;	discover	CCCs of	-on.	samples.	Int.
		environm		soil	1. States	1.	У	different		·	sci.
		ent		1. Loam soil	the CCCs	Pronoun	,	types of	Care		pbk 5
				⇒ Has balanced	of different	ces,	Discussio	soil.			
				particles of	types of	spells,	n				Mk.
				sand clay.	soil.	reads					Int.
				⇒ It contains		writes	Observat		Awarenes		sci.
				more humus		and	ion	Mentioning	S		pbk 5
				than sand		demonst		the			
				and clay.		rates		functions			Int.
				2. Sand soil		meanin		of parts of			sci.
				\Rightarrow It has large		g of		a leaf.	Fluency		syllab
				and rough		words					us bk
				particles.		related					5
				\Rightarrow It is well		to types			Concern		
				aerated		of soil					
				because it has		2. Reads,					New
				large air		internaliz					Fount
				spaces.		e and					. Pbk
				\Rightarrow It dries out		writes					5
				quickly.		texts and					
				3. Clay soil		questions					
				\Rightarrow It has fine		related to					
				smooth		types of					
				particles.		soil .					
				⇒ Difficult to	$\mathbf{X} \cdot \mathbf{A}$						
				plough							
				because it is							
				sticky when							
				wet.							
				An experiment to							
				show drainage in							
				different types of							
				soil.							

1	3	Compone	Compone	Components of	The	The	Guided	Identifying	Appreciati	Different	Mk.
•	J	nts Of	nts of soil	soil	learner;	learner;	discover	the	-on.	types of	Mk.
		Environm	1112 01 2011	⇒ Water	1. Identifies				-011.		Int.
].	У	componen	Caro	soil	
		ent- Soil		⇒ Dissolved	the	Pronounce	D:	ts of soil.	Care	samples.	sci.
				mineral salts	componen	s, spells,	Discussio				pbk 5
				⇒ Air	ts of soil.	reads	n				
				⇒ Rock particles		writes and			Awarenes		
				⇒ Humus	2. States	demonstra		Stating the	S		
				⇒ Living	the	tes	Observat	importanc			
				organisms	importanc	meaning	ion	e of each			
				Humus (Organic	e of each	of words		componen	Fluency		
				matter)	componen	related to		t of soil.			
				\Rightarrow Humus is	t of soil.	componen					
				formed from	3. States	ts of soil.			Concern		
				dead	the	2. Reads,	Guided	Stating the			
				decaying	importanc	internalize	discover	importanc			Int.
				matter.	e of soil to	and writes	У	e of soil to			sci.
				⇒ Bacteria and	people.	texts and		people.			syllab
				fungi help in		questions	Discussio				us bk
				the formation		related to	n				5
				of humus.		soil					
				Water		componen					
				⇒ Water helps to		ts	observati				New
				dissolve many			on				Fount
				minerals to '							. Pbk
				form solution.							5
				Air							
				\Rightarrow Air is found in							
				spaces							
				between soil							
				particles.							
				Living organisms							
				⇒ Living							
				organisms							
				help in							
				decompositio							
				n and - in the							
				soil.							
				An experiment to							
				prove that soil							
				prove mar son							

1	4	Compone	Soil	Soil erosion	The	The	Guided	Defining	Appreciati	Soil	Mk.
	&	nts Of	erosion	⇒ Soil erosion is	learner;	learner;	discover	soil erosion	-on.		Int.
	5	Environm		the removal of		1.	У				sci.
		ent- Soil		top soil by its	soil	Pronounce	,	Stating the	Care	Water	pbk 5
				agents.	erosion.	s, spells,		agents of _			'
				Agents of soil	2. States	reads		soil erosion			
				erosion	the	writes and				School	
				⇒ Flowing water	agents	demonstra	Discussio	Giving the	Awarenes	environme	
				⇒ Animals	of soil	tes	n	types of soil	S	nt	
				⇒ Strong wind	erosion.	meaning		erosion.			Int.
				Types of soil	3. Gives	of words					sci.
				erosion	the	related to					syllab
				⇒ Gully erosion	types of	soil			Fluency		us bk
				⇒ Rill erosion	soil	erosion.					5
				⇒ Sheet erosion	erosion.	2. Reads,	observati				
				a) Gully erosion		internalize	on				
				\Rightarrow This is a type		and writes			Concern		New
				of erosion		texts and					Fount
				where flowing		questions					. Pbk
				water makes		related to					5
				big tunnels		soil					
				along its path.		erosion.					
				b) Rill erosion							
				⇒ This is erosion							
				where flowing							
				water makes							
				small tunnels							
				called rills							
				along its path.							
				W							
				X							
				•							

1	6	Compone	Causes of	Causes of soil	The	The	Guided	Naming	Appreciati	School	Mk.
		nts Of	Soil	erosion	learner;	learner;	discover	the Causes	-on.	environme	Int.
		Environm	erosion	⇒ Mono	1. Names	1.	У	of soil		nt	sci.
		ent- Soil		cropping	the causes	Pronounce		erosion	Care		pbk 5
				⇒ Bush burning	of soil	s, spells,					
				⇒ Deforestation	erosion.	reads					
				⇒ Ploughing		writes and		Stating			
				downhill	2. States	demonstra	Discussio	how each	Awarenes		
				⇒ Over grazing	how each	tes	n	of the	S		
				a) Deforestation	of the	meaning	•	causes			Int.
				\Rightarrow This is the	causes	of words		lead to soil			sci.
				massive	lead to soil	related to		erosion.			syllab
				cutting down	erosion.	causes of			Fluency		us bk
				of trees		soil erosion					5
				without		2. Reads,	observati				
				replacement.		internalize	on				
				\Rightarrow It leaves the		and writes	Υ ,		Concern		New
				soil exposed		texts and					Fount
				to erosion		questions					. Pbk
				agents.		related to					5
				b) Over grazing		causes of					
				⇒ This is the		soil					
				grazing of		erosion/					
				animals in the							
				same piece of							
				land.							
				c) Mono							
				cropping							
				⇒ The growing							
				of the same							
				type of crop in the same							
				piece of land seasonally.							
				seasonally.							
						1		1			

2	1	Compone	Effects of	Effects of soil	The	The	Guided	Stating the	Appreciati	The School	Mk.
	•	nts of	soil		learner;	learner;	discover	effects of	-on.	compoun	Int.
		environm	erosion		1. States	1		soil erosion.	-011.	d	sci.
		ent- soil	and	leads to loss of	the	Pronounce	У	3011 61031011.	Care	u	pbk 5
		6111- 3011	control	soil fertility.	effects of	s, spells,			Cure		PDK 3
			Collifor	\Rightarrow It leaves the	soil	reads					
					erosion.	writes and					
				plant roots bare.	erosion.	demonstra	Discussio	Describing	Awaranas		
				\Rightarrow It leads to	2.	tes		Describing the	Awarenes		
				⇒ inleads to silting of water	2. Describes		n	methods of	3		Int.
				bodies.	the	meaning of words	`	controlling			sci.
					methods	related to					
				⇒ It destroys	of			soil erosion.	Eluanov		syllab us bk
				roads by		effects of	observati		Fluency		
				making trenches.	controllin	soil					5
				Methods of	g soil	erosion. 2. Reads,	on				
					erosion.				Concern		New
				controlling soil erosion		internalize	X		Concern		Fount
						and writes					
				a) Afforestation ⇒ Afforestation is		texts and					. Pbk
						questions					5
				the planting of		related to					
				trees where		effects of					
				they never		soil					
				existed.		erosion					
				b) Bush							
				fallowing:							
				⇒ This is leaving							
				the land to							
				rest for some							
				time without							
				cultivation.							
				c) Crop rotation							
				⇒ This is the							
				growing of							
				different types							
				of crops on							
				the same							
				piece of land							
				seasonally.							

2	2	Compone	Soil	a)	Soil	The	The	Guided	Defining	Appreciati	School	Mk.
		nts of	conservati	–	conservation	learner;	learner;	discover	soil	-on.	demo.	Int.
		environm	on	\Rightarrow	This is the	1. Defines	1.	У	conservati		Garden	sci.
		ent- soil			maintenance	soil	Pronounce	,	on	Care		pbk 5
					of the quality	conservat	s, spells,					
					and	ion.	reads					
					productivity of	2. States	writes and					
					the soil.	ways of	demonstra	Discussio	Stating	Awarenes	Chalkboar	
				b)	Ways of	conservin	tes	n	ways of	S	d	
					conserving	g soil.	meaning		conserving		illustration.	Int.
					soil		of words		soil			sci.
				1.	Proper		related to					syllab
					disposal of		soil			Fluency		us bk
					solid wastes		conservati					5
					e.g. polythene		on	observati				
					bags, plastic		2. Reads,	on				
					materials, and		internalize			Concern		New
					broken		and writes					Fount
					glasses.		texts and					. Pbk
				2.	•		questions					5
					disposal of		related to					
					liquid wastes.		soil					
					E.g. oils,		conservati					
					pesticides.		on					
				3.	Controlling soil							
					erosion							

2	3	Compone	Soil fertility	Soil fertility	The learner	The	Guided	Defining	Appreciati	The local	Mk.
	&	nts of	,	⇒ Soil fertility is	1. Defines	learner;	discover	soil fertility.	-on.	environme	Int.
	4	environm		the ability of	soil	1.	У			nt	sci.
		ent- soil		soil to support	fertility.	Pronounce			Care		pbk 5
				good plant		s, spells,					
				growth.	2. States	reads		Stating (
				Ways of	ways of	writes and		ways of			
				improving soil	improving	demonstra	Discussio	improving	Awarenes		
				fertility.	soil	tes	n	soil fertility.	S		
				a) Practicing	fertility.	meaning	•				Int.
				crop rotation		of words					sci.
				⇒ Crop rotation		related to					syllab
				is the growing		soil fertility.			Fluency		us bk
				of different		2. Reads,	Observat				5
				types of crops		internalize	ion				
				on the same		and writes					
				piece of land		texts and	X '		Concern		New
				season after		questions	Dyavia				Fount
				season.		related to	Brain				. Pbk
				b) By practicing mulching		soil fertility.	storming				5
				⇒ Mulching is							
				→ Molerling is the covering							
				of top soil with			Think pair				
				dry plant			and				
				materials.			share				
				c) By using			Siraro				
				fertilizers.							
				⇒ These are							
				substances							
				added into							
				the soil to							
				improve its							
				fertility.							

2	5	Compone	Fertilizers	Fertilizers	The	The learner	Guided	Defining	Appreciati	Samples	Mk.	
	&	nts of		⇒ Fertilizers are	learner;	1.	discover	fertilizers.	-on	animal	Int.	
	6	environm		chemicals	1. Defines	Pronounce	У			and plant	sci.	
		ent- soil		added into	fertilizers.	s, spells,	,	Stating	Care	remains	pbk 5	
				soil to improve	2. States	reads		types of				
				its fertility.	the types	writes and		fertilizers.				
				Types of soil	of	demonstra						
				fertility	fertilizers.	tes	Discussio	Mentioning	Awarenes			
				1. Natural	3. Mentions	meaning	n	and	S			
				fertilizers	and	of words		describing			Int.	
				2. Artificial	describes	related to		examples			sci.	
				fertilizers	examples	fertilizers		of natural			syllab	
				Natural fertilizers	of natural	2. Reads,		fertilizers.	Fluency		us bk	
				⇒ These are	fertilizers.	internalize					5	
				formed from		and writes	Observat					
				plants and		texts and	ion					
				animal		questions			Concern		New	
				remains.		related to					Fount	
				Examples of		fertilizers					. Pbk	
				natural fertilizers			Brain				5	
				a) Green			storming					
				manure								
				b) Farm yard								
				Making compost								
				manure								
				⇒ Compost								
				manure is got	$\mathbf{Y} \setminus \mathbf{A}$							
				from								
				household								
				refuse, plant								
				remains,								
				leftover food								
				and kitchen								
				refuses.								
				Methods of								
				making compost								
				manure								
				1. Pit method								
				2. Heap method								
				Refer to the								
				laces mades	I					1		

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3	1	Compone	Artificial	Artificial fertilizers	The	The	Guided	Defining	Appreciati	Sample	Mk.
		nts of	fertilizers	\Rightarrow These are	learner;	learner;	discover	the term	-on.	artificial	Int.
		environm		man-made	1. Defines	1.	У	fertilizers.		fertilizers	sci.
		ent- soil		chemicals	artificial	Pronounce			Care		pbk 5
				substances	fertilizers.	s, spells,					
				that are used	2.	reads		Describing			
				to supply	Describes	writes and		the groups			
				plants	the	demonstra	Discussio	of artificial	Awarenes		
				nutrients.	groups of	tes	n	fertilizers.	S		
				Groups of	artificial	meaning					Int.
				artificial fertilizers	fertilizers.	of words					sci.
				1. Straight		related to		Stating the			syllab
				Fertilizers	3. States	fertilizers		advantage	Fluency		us bk
				2. Compound	the	2. Reads,		and			5
				Fertilizers	advanta	internalize	Observat	disadvanta			
				Methods of	ges and	and writes	ion	ges and			
				applying	disadvant	texts and		disadvanta	Concern		New
				artificial	ages of	questions		ges of			Fount
				fertilizers	artificial	related to		artificial			. Pbk
				1. Broadcasting	fertilizers.	fertilizers.	Brain	fertilizers			5
				in the garden.			storming				
				2. Placing							
				around the							
				crop.							
				3. Advantages of							
				artificial							
				fertilizers	\vee						
				⇒ They are quick							
				in improving							
				soil fertility.							
				⇒ They are easy							
				to apply.							
				Disadvantages of							
				artificial fertilizer							
				⇒ They are							
				expensive to							
				buy							
				⇒ They need							
				skilled man							
				power to							

3	2	Heat	Matter	Matter	The	The learner	Guided	Giving the	Appreciati	Books	Mk.
	&	energy		⇒Matter is	learner;	1.	discover	meaning	-on.	Water	Int.
	3			anything that	1. Gives	Pronounce	У	of matter,		Stones	sci.
				occupies	the	s, spells,		mass and	Care	balloons	pbk 5
				space and has	meaning	reads		weight.			
				weight.	of matter,	writes and					
				Mass	mass and	demonstra		Stating the			
				⇒Mass is the	weight	tes	Discussio	properties	Awarenes		
				amount	2. States	meaning	n	of matter.	S		
				/quantity of	the	of words					Int.
				matter	properties	related to					sci.
				contained in	of matter.	matter.					syllab
				an object.		2. Reads,		Giving the	Fluency		us bk
				Weight	3. Give	internalize		examples			5
				⇒Weight is the	examples	and writes	Observat	of matter.			
				force of gravity	of matter	texts and	ion				
				acting normally	4. Draws	questions	V		Concern		New
				on an object.	illustration	related to		Drawing			Fount
				Properties of	s to show	matter.		illustrations			. Pbk
				matter	properties		Brain	to show			5
				a) Matter has	of matter.		storming	properties			
				weight.				of matter.			
				b) Matter							
				occupies							
				space							
				c) Matter							
				expands when							
				heated.							
				Matter exerts							
				pressure.							
				 Examples of 							
				matter							
				Chair, Air, Water,							
				milk							

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3	4	Heat	States of		The	The learner		Naming	Appreciati	Books	Mk.	
	&	energy	matter	1. Solid 2. Liquids	learner;	1.	discover	the states	-on.	Water	Int.	
	5			3. gases	1. Names	Pronounce	У	of matter.		stones.	sci.	
				a) Matter is	the states	s, spells,			Care		pbk 5	
				made up of	of matter.	reads						
				molecules.		writes and		Describes				
				<u>Solids</u>	2.	demonstra		describing				
				⇒ Molecules are	Describes	tes	Discussio	the	Awarenes			
				closely held	the	meaning	n	properties	S			
				together.	properties	of words		of each			Int.	
				\Rightarrow They have a	of each	related to		states of			sci.	
				definite shape.	state of	states of		matter.			syllab	
				molecules in	matter.	matter			Fluency		us bk	
				solids		2. Reads,		Mentioning			5	
					3. Mentions	internalize	Observat	the				
				Examples of	the	and writes	ion	examples				
				solids.	examples	texts and		of each	Concern		New	
				Salt crystals	of each	questions		state of			Fount	
				Stones	state of	related to		matter.			. Pbk	
				<u>Liquids</u>	matter.	states of	Brain				5	
				⇒ Molecules are		matter.	storming					
				relatively								
				spaced								
				⇒ They don't								
				have a								
				definite shape								
				Examples of								
				liquids								
				Water Juice								
				Arrangement of								
				molecules in								
				liquids								
				X								
				Gases								
				⇒ Molecules are								
				far apart								
				⇒ Most cannot								
				be seen but								
				felt								
				⇒ They do not								
				le su ve el eficite								

3	6	Heat	mixtures	Mixtures	The	The	Guided	Defining	Appreciati	Salt	Mk.
		energy		⇒A mixture is a	learner;	learner;	discover	mixtures,	-on.	Sugar	Int.
		0,		combination of	1. Defines	1.	У	solvents,		water	sci.
				two or more	the	Pronounce	,	solutes and	Care	Stones	pbk 5
				substances.	meaning	s, spells,		solutions.		Bean	
				 Examples of 	of	reads				seeds	
				mixtures	mixtures,	writes and				Tea	
				⇒A mixture of	solvents,	demonstra	Discussio	Stating the	Awarenes	leaves.	
				sand and salt.	solutes	tes	n	examples	S		
				⇒A mixture of	and	meaning		of mixtures,			Int.
				gases.	solutions.	of words		solutes,			sci.
				⇒A mixture of	2. State the	related to		solvents			syllab
				grains and	examples	mixtures.		and	Fluency		us bk
				chuff.	of	2. Reads,		solutions.			5
				• Solutes,	mixtures,	internalize	Observat				
				solvents and	solutes,	and writes	ion		Concern		
				solutions	solvents	texts and	V				New
				\Rightarrow A solute is a	and	questions					Fount
				substance that	solutions.	related to					. Pbk
				dissolves in a		mixtures.	Brain				5
				solvent e.g.	3.		storming				
				salt, sugar and	Demonstr						
				glucose.	ates the						
				⇒ A solvent is a	making of						
				substance that	solutions.						
				dissolves a							
				solute e.g.	X .						
				water, milk,							
				kerosene							
				\Rightarrow A solution is a							
				uniform mixture							
				of a solute and							
				solvent.							
				•							

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4 1	Heat	Separatin		The	The	Guided	Describing	Appreciati	Salt	Mk.	
&	energy	g mixtures	mixtures	learner;	learner;	discover	methods of	-on.		Int.	
2			a) Physical sorting	1.	1.	У	separating		Sugar	sci.	
			⇒ This is a	Describes	Pronounce		mixtures.			pbk 5	
			method where	the	s, spells,			Care	Water		
			the hands are	methods of	reads						
			used to pick big	separating	writes and	Discussio			Stones		
			particles from	mixtures	demonstra	n		Awarenes			
			small particles	that is	tes		XX	S	Bean		
			e.g. picking	physical	meaning					Int.	
			stones from rice.	sorting,	of words				Seeds	sci.	
			b) Winnowing	winnowing	related to			Fluency		syllab	
			⇒ Separating	and	separating	Observat			Tea	us bk	
			cereals from	decantatio	mixtures.	ion			leaves.	5	
			husks.	n	2. Reads,			Concern			
			c) By using a		internalize						
			magnet		and writes					New	
			⇒ This method is		texts and	Brain				Fount	
			used when one		questions	storming				. Pbk	
			substance is a		related to	J				5	
			magnetic		separating						
			material.		mixtures.						
			d) Decantation								
			The method of								
			separating solid								
			from a liquid.								
			Step one								
			⇒ Water mixed								
			with impurities.								
			4								
)=								
			032								
			Step two								
			⇒ Impurities left								
			to settle at the								
			bottom of the								
			container.								
			2								

		1		P.11 1.		- ·		I 5 " ·		1	1
4	3	Heat	Separatio	<u>Filtration or</u>	The	The	Guided	Describing	Appreciati	Tea leaves	Mk.
	&	energy	n of	<u>filtering</u>	learner;	learner;	discover	methods of	-on.		Int.
	4		mixtures.	⇒ This is a	1.	1.	У	separating		Water	sci.
				method of	Describes	Pronounce		mixtures.	Care		pbk 5
				separating	the	s, spells,					
				solids from	methods	reads				sand	
				liquids using a	of	writes and					
				filter paper	separatin	demonstra	Discussio		Awarenes		
				and a	g mixtures	tes	n	XX	S		
				funnel.eg	that is	meaning					Int.
				separating	filtration,	of words					sci.
				seeds from	distillation	related to					syllab
				juice.	,	separation			Fluency		us bk
				Illustration	floatation	of mixtures.					5
				Distillation	and	2. Reads,	Observat				
				\Rightarrow It involves	boiling to	internalize	ion		Concern		
				heating the	dryness.	and writes					New
				impure liquid	,	texts and					Fount
				and its vapor		questions					. Pbk
				condensed		related to	Brain				5
				e.g. a mixture		separation	storming				
				of muddy		of mixtures					
				water.							
				Illustration of							
				distillation							
				Floatation							
				⇒A method of							
				separating							
				mixtures where							
				one sinks and							
				the other floats							
				e.g. mixture of							
				saw dust and							
				sand and a							
				mixture of millet							
				grain and							
				stones.							
				Using a							
				separating funnel							

					1	1	1		1	1	
4	5	Heat	Energy	• Energy	The learner;	The	Guided	Defining	Appreciati	A stone	Mk.
	&	energy		⇒ Energy is the	1. Defines	learner;	discover	energy	-on.		Int.
	6			ability to do	energy.	1.	У			String	sci.
				work.	2. States	Pronounce		Stating the	Care		pbk 5
				Types of energy	the types	s, spells,		types of			
				⇒ Kinetic energy	of	reads		energy.		books	
				⇒ Potential	energy.	writes and					
				energy	3. Gives	demonstra	Discussio		Awarenes		
				a) Kinetic energy	examples	tes	n	Giving	S		
				\Rightarrow This is a type of	of	meaning		examples			Int.
				energy	situations	of words		of			sci.
				possessed by	in each	related to		situations in			syllab
				objects in	type of	energy.		each type	Fluency		us bk
				motion or	energy.	2. Reads,		of energy.	,		5
				moving	4. Mentions	internalize	Observat	0,			
				objects.	the forms	and writes	ion	Mentioning	Concern		
				Examples;	of	texts and		the forms			New
				⇒ A ball rolling	energy.	questions		of energy.			Fount
				⇒ A boy running	0,	related to		0,			. Pbk
				b) Potential		energy.	Brain				5
				energy		9,1	storming				
				\Rightarrow This is the type							
				of energy							
				possessed by							
				objects at rest							
				or stationary							
				objects.							
				Examples							
				⇒ A stone resting							
				on the ground							
				⇒ A book resting							
				on a table							
				⇒ Standing/parki							
				ng.							
				• Forms of							
				energy							
				⇒Heat energy							
				⇒light energy							
					l .	l .	I .		ı	i .	

	-	1		T	T	1	1		1	1	, , , , , , , , , , , , , , , , , , ,
5	1	Heat	Heat	Heat	The learner;	The	Guided	Defining	Appreciati	Stove	Mk.
	&	energy		\Rightarrow Heat is the	 Defines 	learner;	discover	heat	-on.		Int.
	2			form of energy	heat as a	1.	У	energy		Water	sci.
				that causes	form of	Pronounce			Care		pbk 5
				the	energy.	s, spells,		Stating the		source	
				temperature	2. States	reads		sources of		pan	
				of matter to	the	writes and		heat			
				increase	sources	demonstra	Discussio	energy.	Awarenes		
				Sources of heat	of heat	tes	n	XX	S		
				⇒ A heat source	energy.	meaning					Int.
				is anything	3. Mentions	of words		Mentioning			sci.
				that can	the uses	related to		the uses of			syllab
				produce heat	of heat	heat		energy.	Fluency		us bk
				1. The sun (the	energy.	energy.		J ,	,		5
				main source of]	2. Reads,	Observat				
				heat energy in		internalize	ion		Concern		
				the		and writes					New
				environment)		texts and					Fount
				2. Friction –		questions					. Pbk
				objects		related to	Brain				5
				rubbing		heat	storming				
				together		energy.	31011111119				
				3. Food		chergy.					
				4. Decaying							
				matter							
				5. Burning fuel							
				e.g. Charcoal,							
				firewood.							
				Uses of heat							
				⇒ For cooking							
				⇒ For drying							
				⇒ ror drying clothes							
				⇒ harvested							
				crops							
				⇒ Heat helps in							
				killing germs							
				⇒ For roasting							
				food							
				\Rightarrow Heat from the							
				sun provides							

5	3	Heat	Effects of	Effects of heat on	The	The	Guided	Defining	Appreciati	Mk.
3	&	energy	heat on	matter	learner;	learner;	discover	heat.	on.	Int.
	4	chergy	matter	⇒ Heat makes	1. States	1	у	11001.		sci.
	7		manci	some objects	the effects	Pronounce	y	Stating the	Care	pbk 5
				to expand	of heat on	s, spells,		effects of	Carc	PDK 5
				⇒ Heat changes	matter.	reads		heat on		
				some state of	3. Draws	writes and		matter.	Awarenes	
				matter.		demonstra	Discussio	maner.	Awdienes	
				⇒ Heat increases	an illustration	tes		Drawing	3	
				→ Hear increases the	to show	meaning	n	illustrations		Int.
				temperature	effects of	of words		to show		sci.
				of matter.	heat on	related to		effects of	Fluency	syllab
				Expansion and	matter.	effects of		heat on	ribericy	us bk
				<u>contraction</u>	manei.	heat on		matter.		5
				a) Expansion		matter.	Observat	maner.	Concern	3
				\Rightarrow This is the		2. Reads,			Concern	
				increase in size		internalize	ion			New
				of an object.		and writes				Fount
				b) Contraction		texts and				. Pbk
				⇒ This is the		questions	Brain			5 5
				→ ITIIS IS ITIE decrease in		related to	storming			3
				size of an			storring			
				object.		effects of heat on				
				Illustrations using		matter.				
				a bras ball and a		maner.				
				bimetallic strip						
				birrieranic sirip						
				Devices with						
				bimetallic strip						
				conditioners		<u> </u>	L	1		

	1			T	T	ı	T .	1	1	ı	T T
5	5	Heat	Dangers	_		The	Guided	Stating the	Appreciati	Bottles of	Mk.
	&	energy	of effects	of heat on matter	1. States	learner;	discover	effects of	-on.	soda	Int.
	6		of heat on	⇒ Weakens	the	1.	У	heat on			sci.
			matter	some objects	dangers	Pronounce		matter.	Care		pbk 5
				⇒ Makes objects	of effects	s, spells,					
				break	of heat	reads		Mentioning			
				⇒ Loss of shape	on	writes and		ways in	Awarenes		
				to some	matter.	demonstra	Discussio	which	S		
				objects	2. Mentions	tes	n	effects of			
				⇒ Causes crack	ways in	meaning		heat on			Int.
				on some	which	of words		matter can			sci.
				objects	dangers	related to		be	Fluency		syllab
				Prevention of	associate	effects of		controlled.			us bk
				effects of	d with	heat on	<) /				5
				<u>expansion and</u>	heat gain	matter.2.	Observat	Drawing	Concern		
				<u>contraction</u>	in matter	Reads,	ion	illustrations			
				⇒ Gaps are left	can be	internalize	V	to show			New
				between	controlle	and writes		how			Fount
				railway lines to	d.	texts and	•	effects of			. Pbk
				leave room for		questions	Brain	heat on			5
				Вар	3. Draws	related to	storming	matter can			
					illustration	effects of		be			
					to show	heat on		controlled.			
				Rails	how	matter.					
				Electric wires and	effects of						
				telephone wire	heat on						
				are loosely fixed	matter						
				on poles to	can be						
				leave/give.	controlle						
				Illustration	d.						
				⇒ Gaps are left							
				on the first							
				soda/bottled							
				drinks to allow							
				expansion of							
				liquid inside							
				when frozen.							
				Illustration							

4	1	Heat	Changes	Changes of states	The	The	Guided	Identifying	Appreciati	Stove	Mk.
6	и &	energy	of states of	of matter	learner;	learner;	discover	the		31046	Int.
	2	energy			,				-on.	Wax	sci.
	2		matter	⇒ A change of	1. Identifies	l.	У	changes of	Cours	Wax	
				state is caused	the	Pronounce		states of	Care		pbk 5
				due to	changes	s, spells,		matter.			
				change in	of states	reads				Match	
				temperature.	of matter.	writes and			Awarenes	box	
				<u>Summary of</u>	2.	demonstra	Discussio	Describing	S		
				<u>changes of states</u>	Describes	tes	n	each of		Water	
				<u>of matter</u>	each of	meaning		the			Int.
				<u>Key</u>	the	of words		changes in			sci.
				A- Condensatio	changes	related to		states of	Fluency	Saucepan	syllab
				n	with	changes in		matter.			us bk
				B- Evaporation	relevant	states of				plate	5
				C- Freezing	examples	matter.	Observat		Concern		
				D- Melting		2. Reads,	ion				
				Changes of state		internalize					New
				of mater		and writes					Fount
				1.melting is the		texts and					. Pbk
				process by which		questions	Brain				5
				a solid changes		related to	storming				
				to a liquid		changes in					
				2. Freezing is the		states of					
				process by which		matter.					
				a liquid changes							
				to a sold.							
				3. Condensation							
				is the process by							
				which gases							
				change to a							
				liquid.							
				4. Evapouration is							
				the process by which liquid state							
				•							
				change to							
				gaseous state.							
				5. Sublimation is							
				thecess by which							
				solid state							
				change directly							

	1 1		T	Т		T	ı	ı	I	1	1 1
6	3	Heat	Heat	Heat transfer	The	The	Guided	Defining	Appreciati	Nails	Mk.
	&	energy	transfer	⇒ Heat transfer is	learner;	learner;	discover	the term	-on.		Int.
	4			the movement	 Defines 	1.	У	heat		Stoves	sci.
				of heat from the	heat	Pronounce		transfer	Care		pbk 5
				source	transfer.	s, spells,				Knife	
				Conductors	2.	reads		Describing			
				\Rightarrow These are	describes	writes and		conductors	Awarenes		
				materials or	conducto	demonstra	Discussio	and	S	Dry wood	
				substances that	rs and	tes	n	insulators.			
				allow heat to	insulators.	meaning					Int.
				pass through	3. Gives	of words		Diving			sci.
				them.	examples	related to		examples	Fluency		syllab
				<u>Examples</u>	of	heat		of			us bk
				1. Silver	conductors	transfer	Observat	conductors			5
				2. Steel	and	2. Reads,	ion	and	Concern		
				<u>Insulators</u>	insulators.	internalize		insulators.			
				\Rightarrow These are	4. Names	and writes					New
				materials that	the	texts and		Naming			Fount
				do not allow	methods of	questions	Brain	the			. Pbk
				heat to pass	heat	related to	storming	methods of			5
				through them	transfer.	heat		heat			
				<u>Examples</u>	5. States	transfer		transfer.			
				1. Plastic	the						
				2. Rubber	importanc						
				Methods of heat	e of heat						
				<u>transfer</u>	transfer by						
				a) Conduction	conductio						
				The process by	n.						
				which heat							
				travels through							
				solids.							
				Experiment on							
				<u>heat transfer in</u>							
				<u>solids</u>							
				Candle wax with							
				pins was placed							
				at different points							
				on a nail as							
				shown below.							

6	5	Heat	Heat	Convection	the learner;	The	Guided	Describing	Appreciati	Water	Mk.
"	&	energy	transfer by	⇒ Convection is	1.	learner;	discover	heat	-on.	Walei	Int.
	6	energy	convectio	the process	Describes	1		transfer by	-011.	Stove	sci.
	0		n and	by which	heat	Pronounce	У	convection	Care	31046	pbk 5
			radiation	heat travels	transfer			and	Cure	Sauce	
			radialion			s, spells, reads		radiation.			
				through	by			radialion.	A	pan	
				liquids and	conducti	writes and	5:	D	Awarenes		
				gases.	on and	demonstra	Discussio	Drawing	S		
				<u>Heat transfer in</u>	convecti	tes .	n	illustrations			1
				gases and liquids	on.	meaning		to show			Int.
					2. Draws	of words		heat			sci.
					illustration	related to		transfer by	Fluency		syllab
					s to show	heat		convection			us bk
				$\Delta V \Delta \Delta$	heat	transfer by		and			5
					transfer	convectio	Observat	radiation.	Concern		
				0	by	n and	ion				
				11 1	convecti	radiation.					New
				// (A) \\	on and	2. Reads,					Fount
				//	radiation.	internalize					. Pbk
						and writes	Brain				5
						texts and	storming				
				⇒ When boiling		questions					
				water, heat		related to					
				passes through		heat					
				the pan by		transfer by					
				conduction		convectio					
				⇒ Water gets		n and					
				heat		radiation.					
				throughout by							
				convection.							
				⇒ Water at the							
				bottom of the							
				saucepan							
				warms first.							
				⇒ Warm/hot							
				water gains							

				kinetic energy and moves on								
				top of the cold								
				one.								
				⇒Someone near								
				a charcoal								
				stove receive								
				heat by								
				radiation.				XX				
				c) Radiation			•					
				⇒ Radiation is								
				the process by								
				which heat								
				travels through								
				a vacuum or space.								
				⇒ We get heat								
				from the sun								
				by radiation.								
				⇒ Heat from a								
				fire source								
				reaches								
				someone near								
				it by radiation.								
7	1	Heat	Importanc	Importance of	The	The	Guided	Stating the	Appreciati	Water	Mk.	
		energy	e of heat	conduction	learner;	learner;	discover	importanc	-on.		Int.	
			transfer	⇒ Helps us to	1. States	1.	У	e of heat	Cours	Stove	sci.	
				cook ⇒ Enables us	the	Pronounce		transfer	Care	Sauce	pbk 5	
				→ Enables us roast	importan ce of	s, spells, reads				pan		
				meat/cassav	heat	writes and			Awarenes	Pari		
				a a	transfer in	demonstra	Discussio		s			
				⇒ Enables us to	different	tes	n					
				iron clothes	states of	meaning					Int.	
				Importance of	matter	of words					sci.	
				<u>convection</u>		related to			Fluency		syllab	

				⇒ Helps move out smoke		heat transfer by					us bk 5	
				from the		convectio	Observat		Concern			,
				kitchen		n and	ion					
				through the		radiation.					New	
				chimneys		2. Reads,					Fount	
				⇒ Helps in		internalize					. Pbk	
				formation of		and writes	Brain				5	
				rainfall		texts and	storming					
				⇒ Water in a		questions						
				kettle/drum/s		related to						
				aucepan		heat						
				boils by		transfer by						
				convection		convectio						
				⇒ Enables fresh		n and						
				air enter the		radiation.						
				house.			X '					
				Importance of								
				radiation. ⇒ Radiant heat								
				⇒ Radiani near from the sun								
				dries clothes								
				⇒ Heat from the								
				sun helps to								
				keep us warm								
				⇒ Heat from the								
				sun helps in								
				heating water								
				causing								
				evaporation								
				helpful in rain								
				formation.								
7	2	Heat	The	A thermo	The	The	Guided	Describing	Appreciati	Thermos	Mk.	
		energy	thermos	flask/vacuum	learner;	learner;	discover	the	-on.	flask	Int.	
			flask	⇒ Flask is an	1.	1.	У	structure of			sci.	
				item used to	Describes	Pronounce		a thermos	Care		pbk 5	

				e		1	
keep hot	the	s, spells,		flask.			
thing hot and	structure of	reads	Discussio				
cold things	a thermos	writes and	n		Awarenes		
cold.	flask.	demonstra		Draws and	S		
\Rightarrow A flask keeps	2. Draws	tes		labels parts			
hot things hot	and names	meaning	Observat	of a			Int.
and cold	parts of a	of words	ion	thermos	Fluency		sci.
things cold by	thermos	related to		flask.			syllab
preventing	flask.	a thermos		XX			us bk
heat loss or		flask			Concern		5
heat gain.		2. Reads,	Brain				
Parts of a thermos		internalize	storming				
flask		and writes	9				New
		texts and					Fount
Functions of the		questions	W.				. Pbk
<u>parts</u>		related to					5
i. Cork prevents		thermos					
heat loss or		flask.					
gain by		HOSE.					
conduction							
ii. Vacuum							
prevents heat							
loss or gain by							
conduction or							
conduction of							
ii. <u>Double silvered</u>	Y						
<u>wall</u> reflects							
heat							
preventing							
heat gain or							
loss by							
radiation.							
v. <u>Vacuum seal:</u> it							
is seal of the							
vacuum during							
manucture.							

				v. <u>Cup</u> for taking							
				the fluid inside.							
7	2	Heat	Heat and	Heat and	the learner;	The	Guided	Defining	Appreciati	Thermos	Mk.
′	3							_			
	&	energy	temperatu	temperature	1. Defines	learner;	discover	the term	-on.	flask	Int.
	4		re	Temperature is	the	.	У	temperatur			sci.
				the hotness or	temperat	Pronounce		e.	Care		pbk 5
				coldness of an	ure.	s, spells,					
				object.	2. Identifies	reads		Identifying			
				- Temperature is	the types	writes and		the types	Awarenes		
				measured using	of	demonstra	Discussio •	of	S		
				an instrument	thermom	tes	n 👞	thermomet			
				called a	eters.	meaning		ers.			Int.
				thermometer		of words		Stating the			sci.
				⇒ Temperature is		related to		temperatur	Fluency		syllab
				measured in	3. States	temperatu		e scales			us bk
				units called	the	re.		and			5
				degrees.	temperatur	2. Reads,	Observat	thermomet	Concern		
				Thermometric	e scales.	internalize	ion	ric liquids.			
				scale	4.	and writes		·			New
				➤ Celsius or	Describes •	texts and		Describing			Fount
				centigrade	a clinical	questions		a clinical			. Pbk
				scale (C)	thermomet	related to	Brain	thermomet			5
				> Fahrenheit	er.	temperatu	storming	er.			
				scale (F)		re.	0.0				
				⇒ The Celsius							
				scale runs from							
				0°C to 100°C.							
				\Rightarrow It has the							
				freezing point							
				at 0C and							
				boiling point at 100° C.							
				⇒ The Fahrenheit							
				scale runs from							
				32°F to 212°F.							
				⇒ The freezing							
			1	- THE HEEZING			j	1		1	

				point is at 32°F							
				and the							
				boiling point							
				at 212°F.							
				⇒ Thermometric							
				1.Mercury					ムノ		
				2.Alcohol							
7	5	Heat and	Types of	Types of	The	The	Guided	Identifying	Appreciati	Clinical	Mk.
'		energy	thermome	thermometers	learner;	learner;	discover (the types	-on.	thermome	Int.
		chergy	ters	Clinical	1. Identifies	1.	у	of	011.	ters	sci.
			1013	thermometers	the types	Pronounce	y	thermomet	Care	1013	pbk 5
				• The six's	of	s, spells,		ers.	Carc		DDK 5
				maximum and	thermom	reads		C13.	Awarenes		
				minimum	eters.	writes and	Discussio	Describing	S		
				thermometer.	2.	demonstra	n	a clinical	3		
				The wall	Describes	tes		thermomet			
				thermometer	the	meaning		er.	Fluency		Int.
				The ordinary	clinical	of words	Observat	Ci.	riocricy		sci.
				scientific	thermom •		ion	Drawing			syllab
				thermometer.	eter.	thermomet	1011	and	Concern		us bk
				The clinical	3. Draws	ers		labeling	Concern		5
				thermometer.	and label	2. Reads,		the parts of			
				⇒ The clinical	the parts	internalize	Brain	a clinical			
				thermometer	of a	and writes	storming	thermomet			New
				is used to	clinical	texts and	3101111119	er			Fount
				measure the	thermom	questions		OI .			. Pbk
				human body	eter.	related to					5
				temperature.	O.O.I.	thermomet					
				⇒ It's marked		ers.					
				from 32°C to							
				42°C.							
				Diagram of a							
				clinical							
				thermometer.							
				<u>incilionicici.</u>							

7	6	Heat	Six's	Six's minimum	The	The	Guided		Appreciati	The Six's	Mk.
		energy	thermome	and maximum	learner;	learner;	discover	Describing	-on.	thermome	Int.
			ter	thermometer	1.	1.	У	the Six's		ters	sci.
				\Rightarrow The six's	Describes	Pronounce		thermomet	Care		pbk 5
				thermometer	the Six's	s, spells,		er.			
				measures the	thermom	reads			Awarenes		Int.
				highest and	eter.	writes and	Discussio	Drawing	S		sci.
				the lowest	3. Draws	demonstra	n	and			syllab
				temperatures	and label	tes		labeling			us bk
				of the day.	the parts	meaning	•	the parts of	Fluency		5
				\Rightarrow The	of a Six's	of words	Observat	the Six's			
				thermometer	thermom	related to	ion	thermomet			New
				uses both	eter.	thermomet		er	Concern		Fount
				mercury and		ers					. Pbk
				alcohol.		2. Reads,					5
				⇒ It is used in		internalize	Brain				
				weather		and writes	storming				
				stations and		texts and					
				by farmers.		questions					
						related to					
						thermomet					
8	1	Heat	Temp.	Changing temp.	The	ers. The	Guided	Converting	Appreciati	Chalkboar	Mk.
0	•	energy	conversio	from Celsius scale	learner;	learner;	discover	temp. from	-on.	d	Int.
		chergy	n	to Fahrenheit	1. Converts	1	у	Celsius	-011.	illustration	sci.
			••	scale Formula	temperat	Pronounce	,	scale to	Care	mosnanon	pbk 5
				(9/5C) + 32 =°F	ure from	s, spells,		Fahrenheit	Caro		
				Example I	Celsius	reads		scale using			Int.
				Change 75°C to	scale to	writes and		the given	Awarenes		sci.
				Fahrenheit scale	Fahrenhei	demonstra	Discussio	formulae.	S		syllab
				Solution	t scale	tes	n				us bk
				X	using the	meaning					5
				X	given	of words					
					formula.	related to			Fluency		
						temperatu	Observat		-		New
						re.	ion				Fount

				$(9/5) + 32 = {}^{0}F$ $(9/5 \times 75) + 32 = {}^{0}F$ $9 \times 15 = 135$ $135+32 = {}^{0}F$ $167 = {}^{0}F$ Therefore $75{}^{0}F = 167{}^{0}F$		2. Reads, internalize and writes texts and questions related to temperature.	Brain storming		Concern		. Pbk 5	
				Example II Convert 20° C to Fahrenheit. Solution $(9/5c) + 32 = {}^{0}F$ $9/5 \times 20 + 32 = {}^{0}F$ $9 \times 4 = 36$ 36 + 32 = 68 $68 = {}^{0}F$ Therefore 20°C = 68°F								
8	2	Heat energy	Temp. Conv'n.	Changing temp. from Fahrenheit scale to Celsius scale Formula (9/5C) + 32 = 0F Example I Change 2120F to Celsius scale Solution	The learner; 1. Converts temperat ure from Fahrenhei t scale to Celsius scale using the given formula.	The learner; 1. Pronounce s, spells, reads writes and demonstrates meaning of words related to temperature. 2. Reads, internalize	Guided discover y Discussion Observation Brain storming	Converting temp. from Fahrenheit scale to Celsius scale using the given formulae.	Appreciati -on. Care Awarenes s Fluency Concern	Chalkboar d illustration	Mk. Int. sci. pbk 5 Int. sci. syllab us bk 5 New Fount . Pbk 5	

				Solution		and writes					
				$5/9(^{0}F - 32) = ^{0}C$		texts and					
				$5/9(212 - 32) = {}^{0}C$		questions					
				5/9 x 180 = °C		related to					
				5x20 = °C		temperatu					
				100 = °C		re.					
				Therefore 212 ⁰ F = 100 ⁰	C						
				Therefore 212 F = 100							
8	3	Growing	Tuber	Classification of	The	The	Guided	Defining	Appreciati	Different	Mk.
Ŭ	&	crops	crops	tubers	learner;	learner;	discover	tuber	-on.	tuber	Int.
	4	0.000	0.000	Tuber crops	1. Defines	1.	У	crops.	.	crops like	sci.
	_			⇒ These are	tuber	Pronounce	, Discussio	12	Care	Irish	pbk 5
				crops that store	crops.	s, spells,	0			potatoes	'
				their food in	·	reads		Stating the			Int.
				swollen	2. States	writes and		classes of	Awarenes	Carrots	sci.
				underground	the	demonstra		tuber	S		syllab
				roots or stems.	classes of	tes	Observat	crops.		cassava	us bk
				 Classes of tuber 	tuber	meaning	ion				5
				crops	crops.	of words					
				⇒ Root tubers	3. Gives	related to		Giving	Fluency		
				⇒ Stem tubers	examples	tuber	D	examples			New
				a) Root tubers	of tuber	crops	Brain	of tuber	C = 10 = 0 = 110		Fount
				⇒ These are crops that	crops.	2. Reads, internalize	storming	crops.	Concern		. Pbk 5
				store their		and writes					3
				food in the		texts and					
				swollen		questions					
				underground		related to					
				roots.		tuber					
				Examples of		crops.					
				root tubers							
				⇒ Cassava							
				⇒ Sweet							
				potatoes							
				⇒ Carrots							

				 ⇒ Beat root ⇒ Turnips b) Stem tubers ⇒ These are crops that store their food in swollen underground stems. • Example of stem tubers ⇒ Irish potatoes ⇒ Yams 							
8	5 & 6	Growing crops	Growing and caring for tuber crops.	Plating materials for common tuber crops ⇒ Stem cuttings ⇒ Veins/runner stems ⇒ Tubers with buds Care of tuber crops ⇒ Watering: water helps during photosynthesis . ⇒ Pruning: This is the removal of excess branches from the plant. ⇒ Manuring: Adding	The learner; 1. Name the planting materials for different tuber crops. 2. Describes the common care given to tuber crops.	The learner; 1. Pronounce s, spells, reads writes and demonstrates meaning of words related to tuber crops 2. Reads, internalize and writes texts and questions related to tuber crops.	Guided discover y Discussion Observation Brain storming	Naming the planting materials for tuber crops. Describing the common care given to tuber crops.	Appreciati -on. Care Awarenes s Fluency Concern	Different tuber crops like Irish potatoes Carrots Cassava stem cuttings	Mk. Int. sci. pbk 5 Int. sci. syllab us bk 5 New Fount . Pbk 5

				manure/fertiliz ers for better crop yields. ⇒ Mulching: the covering of top soil with dry plant materials to keep moisture in the soil. ⇒ Spraying: helps to kill pests. ⇒ Thinning: This is removing excess plants or unproductive plants from the garden. ⇒ Weeding: This is the removal of unwanted plants.								
9	1	Growing	Common	Common pests of		The	Guided	Defining	Appreciati	Chalkboar	Mk.	
		crops	tuber crop pests	tuber crops Tuber crop pests	learner; 1. Defines	learner;	discover y	tuber crop pests.	on.	d illustrations	Int. sci.	
			hesis	⇒ These are	tuber	Pronounce	y	pesis.	Care		pbk 5	
				organisms	crop	s, spells,		Mention				
				that destroy	pests.	reads		CCCs of				
				crops.	0.14	writes and	Discussio	tuber crop	Awarenes			
				Examples of tuber pests	2. Mentions the CCCs	demonstra tes	n	pests.	S			
				⇒ Moles	of tuber	meaning					Int.	
				⇒ Army worms	crop pests.	of words		Stating			sci.	
				⇒ Nematodes		related		examples	Fluency		syllab	

9 2	Growing	Tuber	⇒ Rats ⇒ Caterpillars ⇒ Sweet potato weevils. Characteristic of common tuber pests. ⇒ Some have strong claws for digging into the soil. ⇒ Some have well developed incisor teeth for cutting tubers. ⇒ Some stay in tunnels ⇒ Some have fingers in their limb for uprooting crops. Controlling tuber crop pests. ⇒ By use of scare crows ⇒ Using traps to catch. ⇒ Physical guarding. ⇒ Spraying and dusting. Diseases of tuber	3. States examples of tuber crop pests. 4. Mentions ways of controlling tuber crop pests.	tuber crop pests. 2. Reads, internalize and writes texts and questions related to tuber crop pests.	Observation Brain storming Guided	of tuber crop pests. Mentioning ways of controlling tuber crop pests.	Concern	Chalkboar	New Fount . Pbk 5	
	crops	crop	crops	learner;	learner;	discover	common	on.	d	Int.	
<u> </u>	2.268	1 2. TP	1	10 311 1017		3,000,01			_ ~		

diseases	1. cassava	1. Identifies	1.	У	tuber crop		illustrations	sci.
	mosaic	common	Pronounce	-	diseases.	Care		pbk 5
	⇒ Cassava	tuber	s, spells,					
	mosaic	crop	reads					
	attacks.	diseases.	writes and	Discussio		Awarenes		
	⇒ Caused by		demonstra	n	Stating the	S		
	a virus and	2. States	tes		effects of			
	spread by	the	meaning		diseases on			Int.
	white fly.	effects of	of words		tuber			sci.
	2. Bacteria blight	diseases	related	Observat (crops.	Fluency		syllab
	⇒ Attacks	on tuber	tuber crop	ion				us bk
	sweet	crops.	diseases					5
	potatoes,		2. Reads,		Stating	Concern		
	lrish	3. States	internalize		ways of			
	potatoes	ways of	and writes	Brain	controlling			New
	and yam.	controllin	texts and	storming	the			Fount
	3. Wilt disease	g tuber	questions		diseases of			. Pbk
	⇒ Affects the	crop	related to		tuber			5
	leaves of	diseases.	diseases		crops.			
	tuber crops.							
	Effects of diseases							
	on tuber crops							
	⇒ They lower							
	the quantity							
	and quality of							
	yields <							
	⇒ They damage							
	roots, leaves							
	and fruits.							
	 Controlling 							
	tuber crop							
	disease							
	⇒ Uprooting							
	and burning							
	the infected							
	crops.							

				. C							
				⇒ Spraying and							
				dusting with							
				pesticide.							
9	3	Growing	Harvesting	Harvesting,	The	The	Guided	Defining	Appreciati	Sacks	Mk.
		crops	,	processing and	learner;	learner;	discover	harvesting_	-on.		Int.
			processin	storage of tuber	 Defines 	1.	У				sci.
			g and	crops	harvestin	Pronounce	Discussio		Care		pbk 5
			storage of	<u>Harvesting</u>	g.	s, spells,	n	Stating		Floor	
			tuber	⇒ The process		reads		ways of			Int.
			crops.	of removing	2. States	writes and		harvesting,	Awarenes		sci.
			-	ready tuber	ways of	demonstra		processing	S		syllab
				crops from	harvestin	tes	Observat	and storing			us bk
				the garden.	g,	meaning	ion	tuber	Fluency		5
				Ways of	processin	of words		crops.	•		
				harvesting	g and	related to					
				⇒ Uprooting	storing	tuber	Brain		Concern		New
				them using	tuber	crops	storming				Fount
				hands	crops.		J				. Pbk
				⇒ Digging out	·	2. Reads,					5
				using a hoe		internalize					
				⇒ Digging out		and writes					
				using small		texts and					
				sticks		questions					
				Processing tuber		related to					
				crops.		tuber					
				⇒ Peeling using		crops.					
				knives		- 1					
				⇒ Slicing in small							
				pieces							
				⇒ Sun drying							
				them for							
				storage.							
				Storage of tuber							
				crops							
				⇒ Storing in							
				granaries							
				grandies						L	<u> </u>

				 ⇒ Storing in silos ⇒ refrigerating Importance of storing tuber crops. • Prevents wastage. • For future use. • For planting in the next season. 								
9	4	Growing crops	Science oriented clubs in schools	Science oriented clubs in schools • Aims of science oriented clubs ⇒ Make science lessons interesting ⇒ Enable pupils get science skills ⇒ Teach members new farming methods ⇒ Give opportunity to learners to meet and share scientific knowledge • Example of science oriented clubs. ⇒ Young farmers club ⇒ Wildlife club	The learners; 1. States the aims of science oriented clubs in schools. 2. Mentions examples of science oriented clubs. 3. States the aims of young farmers' association in a school.	The learner; 1. Pronounce s, spells, reads writes and demonstrates meaning of words related to science oriented clubs 2. Reads, internalize and writes texts and questions related to science oriented clubs.	Guided discover y Discussion Observation Brain storming	Mentioning stating the aims of a science oriented club Mentioning examples of science oriented clubs. Stating the aims of young farmers' association .	Appreciati -on. Care Awarenes s Fluency Concern	The school environme nt	Mk. Int. sci. pbk 5 Int. sci. syllab us bk 5 New Fount . Pbk 5	

				 ⇒ Science and technology club • The young farmers club • An organization of young boy and girls in or out of school who participate in farming activities. • Aims of young farmers club ⇒ Teach how to grow and care for crops. ⇒ Grow crops and sell to get money ⇒ Teach new methods of farming. 								
9	5	Bacteria and fungi	Bacteria	• <u>Bacteria</u> ⇒Bacteria are	The learners;	The learner;	Guided discover	Describing bacteria	Appreciati -on.	A chart showing	Mk. Int.	
				single celled organisms that	1. Describes	I. Pronounce	У		Care	the structure	sci. pbk 5	
				reproduce by	bacteria.	s, spells,		Stating the		of a		
				binary fission or		reads		habitat for		bacterium		
				cell division. Structure of a	2. States	writes and demonstra	Discussio n	bacteria.	Awarenes s	•		
				bacterium	the habitat	tes	'	Stating the	٥			
					for	meaning		CCCs of			Int.	
					bacteria.	of words		bacteria.			sci.	

				Places where bacteria are found ⇒ Pit latrine ⇒ Rubbish pits ⇒ In the soil ⇒ Contaminated water Reproduction in bacteria. ⇒ Bacteria reproduce by a process of binary fission. ⇒ In binary fission. ⇒ In binary fission, one cell divides into two bacterial cells Illustration. Characteristics of bacteria ⇒ Bacteria are singe celled ⇒ Bacteria reproduce by cell division. ⇒ They are	3. States the CCCs of bacteria.	related to bacteria 2. Reads, internalize and writes texts and questions related to bacteria	Observation Brain storming		Concern		syllab us bk 5 New Fount . Pbk 5	
9	6	Bacteria and fungi	Nature of bacteria	microscopic organisms (only seen with a microscope). • Nature of bacteria	The learners;	The learner;	Guided discover	Describing the nature	Appreciati	A chart showing	Mk.	

				1. Harmful	1.	1.	У	of bacteria		the	sci.	
				bacteria	Describes	Pronounce			Care	structure	pbk 5	
				2. Useful bacteria	the	s, spells,				of a		
				/harmless	nature of	reads		Drawing		bacterium	Int.	
				bacteria.	bacteria.	writes and	Discussio	the	Awarenes		sci.	
				 Harmful 		demonstra	n	structure of	S		syllab	
				bacteria		tes		bacteria.			us bk	
				\Rightarrow They cause	2. Draws	meaning					5	
				diseases to	the	of words		XX				
				people,	diagrams	related to			Fluency		New	
				animals and	of the	nature	Observat				Fount	
				plants.	shapes of	bacteria	ion				. Pbk	
				⇒ They make	bacteria.	2. Reads,			Concern		5	
				milk go bad.		internalize						
				⇒They make		and writes						
				wound and		texts and	Brain					
				cuts become		questions	storming					
				septic.		related to						
				 Types of 		the nature						
				bacteria		of						
				⇒The bacteria is		bacteria						
				grouped								
				according to								
				their shapes								
				1. Cocci or								
				coccus								
				bacteria.	X /							
				2. Bacilli or								
				bacillus.								
				3. Spirilla and								
				spirochete 4. Vibro bacteria.								
1	1	Bacteria	Harmful	Harmful bacteria	The learner	The	Guided	Describing	Appreciati	A chart	Mk.	
0		and Fungi	bacteria	Cocci or	1.	learner;	discover	the harmful	-on.	showing	Int.	
		and rongi	Daciella	coccus	Describes	1	у	bacteria	-011.	the	sci.	
				⇒ These are	the	Pronounce	y	Daciona	Care	shapes	pbk 5	
L				111030 GIO		1.1011001100		1	1 0 01 0	31.0003	PORU	

	-1:tt 1		1	1	1	11	
spherical	different	s, spells,				bacterium	
shaped in	harmful	reads		Drawing		•	Int.
shape.	bacteria.	writes and	Discussio	the	Awarenes		sci.
Example	2. Identifies	demonstra	n	different	S		syllab
1. Staphylococc	the	tes		shapes of			us bk
us which	examples	meaning		bacteria.			5
causes boils.	of	of words					
2. Streptococcus	harmful	related to			Fluency		New
which causes	bacteria.	harmful	Observat	XX			Fount
sore throat.		bacteria	ion				. Pbk
3. Pneumonococ		2. Reads,			Concern		5
cus which		internalize					
causes		and writes					
pneumonia.		texts and	Brain				
Bacilli/bacillus		questions	storming				
⇒ These are rod		related to					
shaped		the nature					
bacteria.		of harmful					
Example		bacteria					
1. Bacillus							
anthrasis							
which cause							
anthrax.							
2. Salmonella							
typhi which							
causes							
typhoid.							
• Spirilla							
(spirochetes)							
⇒ These are							
spiral shaped.							
Example							
1. Treponema							
pallidum							
which causes							
syphilis							

0 2	and Fungi	bacterial bacterial	Common bacterial	lne learner;	ine learner;	Guiaea discover	the harmful	-on.	showing	MK. Int.	
1 2	Bacteria and Fungi	Common	 ⇒ These are bacteria that are useful in our daily lives. ⇒ Break volumes of faeces in latrines, tanks and sewage. systems. ⇒ Help in decaying and rotting. ⇒ Help in making of cheese. ⇒ They are found in root nodules of legumes. ⇒ Help in making vitamin B₁₂ and K. ⇒ Help in process of digestion of food. Common 	The	The learner;	Guided	Describing the harmful	Appreciati	A chart showing	Mk. Int.	

	diseases	diseases	1.	1.	У	bacteria		the	sci.
		Tuberculosis	Describes	Pronounce			Care	shapes	pbk 5
		Typhoid	the	s, spells,				bacterium	
		Cholera	harmful	reads		Drawing			Int.
		Control of	bacteria.	writes and	Discussio	the	Awarenes		sci.
		<u>bacterial</u>		demonstra	n	different	S		syllab
		<u>diseases</u>	2. Draws	tes		shapes of			us bk
		⇒ Keeping	the	meaning		bacteria.			5
		cleanliness	diagrams	of words		XX			
		⇒ Good	to show	related to			Fluency		New
		feeding/eatin	different	harmful	Observat				Fount
		g a balanced	shapes of	bacteria	ion				. Pbk
		diet.	bacteria.	2. Reads,			Concern		5
		Prevention of		internalize					
		bacterial		and writes					
		diseases.		texts and	Brain				
		⇒ Through		questions	storming				
		immunization		related to					
		of children.		the nature					
		⇒ Boiling water		of harmful					
		for drinking.		bacteria					
		• <u>Treatment.</u>							
		⇒ Using							
		antibiotics.							
		⇒ Using							
		antiseptics.							
		Antibiotics The are given.							
		⇒ These are							
		substances							
		used to kill							
		germs in our bodies.							
		• <u>Antiseptics</u> ⇒ These are							
		→ mese are substances							
		used to kill							
		L 0360 10 KIII				<u> </u>		l	

				germs on wounds and cuts. • <u>Disinfectants</u> ⇒ These are chemicals used to kill germs on surfaces e.g. toilet and floors.								
1 0	3	Bacteria and Fungi	<u>Fungi</u>	Fungi ⇒ These are multicellular organisms that mostly reproduce by spores. • Places where fungi are found ⇒ Rotting or decaying matter. ⇒ In the soil • Examples of fungi ⇒ Mushrooms ⇒ Puffballs ⇒ Toadstools ⇒ Moulds • Reproduction in fungi reproduce by means of spores except	The learner 1. Describes fungi. 2. State the examples of fungi	The learner; 1. Pronounce s, spells, reads writes and demonstrates meaning of words related to fungi 2. Reads, internalize and writes texts and questions related to the nature of fungi	Guided discover y Discussion Observation Brain storming	Describing the fungi Stating the different examples of fungi	Appreciati -on. Care Awarenes s Fluency Concern	A chart showing the shapes bacterium .	Mk. Int. sci. pbk 5 Int. sci. syllab us bk 5 New Fount . Pbk 5	

budding. ■ Breeding and feeding of fungi ⇒ Fungi breed in places that are moist, warm and dark. ■ Harmless/useful fungi ■ Harmless/useful fungi ⇒ Some fungi are eaten as food e.g. mushroom ⇒ Fungi decays and help in humus formation. Harmful fungi ⇒ Some are poisonous to man e.g. toadstool. Some cause diseases e.g. ringworms, eczema. ■ Fungi make food go bad. ■ Parts of a mushroom budding. ■ Breeding and feeding placed in places that are moist, warm and dark. The learner; 1. Describes useful fungi 2. Draws and labels the parts of a mushroo of words internality and with tax and question related in the harmless fungi and write tax and question related in the harmless fungi and tax an	Drawing and labeling parts of a mushroom. Cobservation Brain storming Drawing and labeling parts of a mushroom. Awarenes s Fluency Concern Drawing and labeling parts of a mushroom. Awarenes s Fluency Concern Drawing and labeling parts of a mushroom. Solution Concern Drawing and labeling parts of a mushroom. Fluency Concern Drawing and labeling parts of a mushroom. Solution Concern Drawing and labeling parts of a mushroom. Solution Solution Concern Drawing and labeling parts of a mushroom. Solution Solutio
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			Functions of the parts. • Cap - It holds and protects the gills. • Gills -It produces and store spore. • Stalk -It holds the cap in upright position.								
1 5	BACTE AND FUNGI	RIA Fungal diseases	Fungal disease 1. Ringworms 2. Eczema 3. Athletes foot 4. Candidiasis. Prevention and control. ⇒ Proper personal hygiene. ⇒ Use of disinfectant to clean toilet. ⇒ Avoid sharing clothes, fowels and knickers. Facts about fungi reproduce by	The learners; 1. Identifies some of the fungal diseases. 2. States ways of preventin g and controllin g fungal diseases. 3. Mentions some of the facts about fungi and bacteria.	The learner; 1. Pronounce s, spells, reads writes and demonstrates meaning of words related to Fungal diseases. 2. Reads, internalize and writes texts and questions related to the Fungal	Guided discover y Discussion Observation Brain storming	Identifying some of the fungal diseases. Stating ways of preventing and controlling fungal diseases. Mentioning some facts about fungi	Appreciati -on. Care Awarenes s Fluency Concern	Local environme nt	Mk. Int. sci. pbk 5 Int. sci. syllab us bk 5 New Fount . Pbk 5	

				yeast which								
				reproduces								
				by budding.								
				⇒ Fungi are								
				multicellular.								
1	6	Bacteria	Comparin	Comparing fungi	The	The	Guided	Stating the	Appreciati	A chart	Mk.	
0		and fungi	g fungi	and bacteria.	learner;	learner;	discover	similarities	on.	showing	Int.	
			and	Similarities.	1. States	1.	У	Between		the	sci.	
			bacteria.	⇒Both are useful	the	Pronounce		fungi and	Care	shapes	pbk 5	
			Similarities	and harmful.	similarities	s, spells,	•	bacteria.		bacterium		
				⇒Both cause	between	reads					Int.	
				diseases.		writes and	Discussio		Awarenes		sci.	
				⇒They both	fungi and	demonstra	n	Stating the	S		syllab	
				cause diseases	bacteria.	tes		differences			us bk	
				that are cured	2. States	meaning		between			5	
				and treatable.	the	of words		fungi and				
				⇒They both feed	differenc	related to	Y '	bacteria.	Fluency		New	
				and	es	harmless	Observat				Fount	
				reproduce.	between	fungi	ion				. Pbk	
				Differences	fungi and	2. Reads,			Concern		5	
				between fungi		internalize						
				and bacteria	bacteria.	and writes	Brain					
				Fungi reproduce		texts and	storming					
				by spores while		questions						
				bacteria		related to						
				reproduce by cell	V	the						
				division.	X /	harmless						
						fungi						