


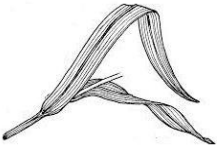
## P.4 SCHEME OF WORK SCIENCE TERM 1-3 2024

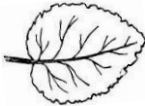


W K	P D	TOPIC	TOPIC	CONTENT	SUBJ. COMP'NCES	LANG. COMP'NCES	METHODS	ACTIVITIES	IND. OF L.S.V	INST. MAT.	REF.	RE M.
1	1	Plant life	Floweri ng plants	<b>Flowering plants</b> - Flowering plants are plants that bear flowers. <b>Example of flowering plants</b> - Maize Plants - Bean Plants - Banana Plants - Tea plants - Coffee Plant <b>Characteristics of flowering plants</b> - Flowering plants bear flowers. - Most flowering plants reproduce by means of seeds. <b>Structure of a flowering plant</b> - Stem - The root system - The terminal bud - Axillary bud - Node and internode	The learner; 1. Defines flowering plants 2. Gives examples of flowering plants. 3. States the characteristics of flowering plants. The learner; 1. Draws the structure of a flowering plant. 2. names the parts of a flowering plant 3. Identifies the systems of a flowering plant. 4. Draws and names parts of a flowering plant	The learner; 1. Pronounces, spells, reads writes and demonstrates meaning of words related to flowering plants e.g. Bear, reproduce, and flower. 2. Reads, internalize and writes texts and questions related to flowering plants.	Guided discovery  Discussion  observatio n	Defining flowering plants  Giving examples of flowering plants  Drawing the structure of a flowering plant.  Naming parts of a flowering plant.	Appreciation.  Care  Awareness  Fluency  Concern	Floweri ng plants          Int. sci. syllab us bk 4	Mk. Int. sci. pbk 4          Int. sci. syllab us bk 4	
1	2	Plant life	Structu re of a leaf	<b>Structure of a leaf</b>	The learner; 1. Draws the structure of a leaf.	The learner; 1. Pronounces, spells, reads writes and	Guided discovery  Discussion	Drawing the structure of a leaf	Appreciation.  Care	Differen t types of leaves	Mk. Int. sci. pbk 4	

					2. Names the							
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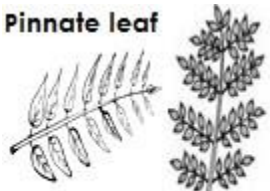

				<div data-bbox="421 308 719 472"> </div> <div data-bbox="421 480 719 928"> <p><b>Functions of parts of a leaf</b></p> <p><b>1. Leaf stalk</b></p> <ul style="list-style-type: none"> <li>- Holds the leaf on the branch</li> </ul> <p><b>2. Midrib</b></p> <ul style="list-style-type: none"> <li>- Transports manufactured food and water.</li> </ul> <p><b>3. Leaf blade</b></p> <ul style="list-style-type: none"> <li>- Has stomata used for breathing/ gaseous exchange</li> </ul> </div>	<p>parts of a leaf.</p> <p>3. Mentions the functions of each part of a leaf.</p>	<p>demonstrates meaning of words related to flowering plants e.g. Bear, reproduce, and flower.</p> <p>2. Reads, internalize and writes texts and questions related to flowering plants.</p>	Observation	<p>Naming parts of a leaf.</p> <p>Mentioning the functions of parts of a leaf.</p>	<p>Awareness</p> <p>Fluency</p> <p>Concern</p>	brought in the class.	Int. sci. syllabus bk 4	
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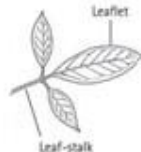

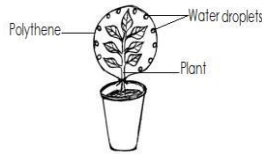
<b>1</b>	<b>3</b>	<b>Plant life</b>	<b>Leaf venation</b> - Leaf venation is the arrangement of veins in a leaf. <b>Types of leaf venation</b> 1. Network leaf venation 2. Parallel leaf venation. <b>NET WORK LEAF VENATION</b> □ The leaf has veins made like a net. <b>Illustration</b>	<b>The learner;</b> 1. Defines the term leaf venation. 2. Identifies the types of leaf venation. 3. Give examples of plants the network and parallel leaf venation.	<b>The learner; 1.</b> Pronounces, spells, reads and writes and demonstrates meaning of words related to leaf venation e.g. network and parallel 2. Reads, internalize and writes texts and questions related to leaf venation.	Guided discovery  Discussion  Observation	Defining leaf venation  Identifying types of leaf venation.  Giving examples	Appreciation.  Care  Awareness  Fluency  Concern	Different types of leaves brought in the class	Mk. Int. sci. pbk 4          Int. sci. syllabus bk 4	
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1				 <p>Network veins</p> <p><input type="checkbox"/> Network venation is found in leaves of dicotyledonous plants.</p> <p><b>Example of plants with network leaf venation</b> Bean, Hibiscus, Flower, Peas</p> <p><b>Parallel leaf venation</b></p> <p><input type="checkbox"/> The veins in a leaf run from the leaf stalk to the apex of the leaf in a parallel form.</p>  <p><input type="checkbox"/> Parallel venation is found in leaves of monocotyledonous plants like; Maize, Millet, Sugarcane, Rice, Grass and wheat plants.</p>	<p>The learner;</p> <ol style="list-style-type: none"> <li>1. Defines the term leaf venation.</li> <li>2. Identifies the types of leaf venation.</li> <li>3. Give examples of plants the network and parallel leaf venation.</li> </ol>		<p>Guided discovery</p> <p>Discussion</p> <p>observation</p>	<p>of leaf venation</p> <p>Defining leaf venation</p>			<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
1	4	Plant	Types	<b>TYPES OF LEAVES</b>	<b>The learner</b>	<b>The learner;</b>	Guided	Identifying	Appreciati-	Differen	Mk.	

		life	of leaves	<p>1. Simple leaves 2. Compound leaves</p> <p><b>SIMPLE LEAVES</b> A simple leaf is a leaf with one leaf blade and one leaf stalk.</p> <p><b>Examples of simple leaves</b></p> <ul style="list-style-type: none"> <li>- Simple serrated</li> <li>- Simple lobed leaf</li> <li>- Simple entire</li> <li>- Simple divided entire</li> <li>- Simple palmate</li> </ul> <p><b>Simple serrated</b></p>    <p><b>Simple divided entire</b></p> <p>etc.</p>	<p>1. Identifies the types of leaves.</p> <p>2. Describes simple leaves.</p> <p>3. Mentions examples of simple leaves.</p> <p>4. Draws the different structures of simple leaves</p>	<p>1. Pronounces, spells, reads and demonstrates meaning of words related to leaf venation e.g. network and parallel</p> <p>2. Reads, internalize and writes texts and questions related to simple leaves</p>	<p>discovery</p> <p>Discussion</p> <p>observation</p>	<p>the types of leaves.</p> <p>Describing simple leaves.</p> <p>Mentioning examples of simple leaves.</p> <p>Drawing the structure of simple leaves</p>	<p>on.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>t types of leaves brought in the class</p> <p>Int. sci. syllabus bk 4</p>	
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1	5	Plant life	Types of leaves	<b>Compound leaves</b> <b>Types of leaves</b> <b>Compound leaves</b> <input type="checkbox"/> A compound leaf	<b>The learner</b> 1. Describes simple leaves. 2. Mentions	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates	Guided discovery	Describing comp. leaves.	Appreciation. Care	Different types of comp.	Mk. Int. sci. pbk 4	
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				<p>is a leaf with many leaflets on one main leaf stalk.</p> <p><input type="checkbox"/> The leaflets are divided at original leaf stalk.</p> <p><input type="checkbox"/> Each leaflet has its own small stalk called rachis</p> <p><b>Examples of compound leaves</b></p> <ol style="list-style-type: none"> <li>Compound pinnate leaf</li> <li>Compound bipinnate leaf</li> <li>Compound trifoliate leaf</li> <li>Compound digitate leaf</li> </ol> <p><b>Illustration</b></p> <p><b>Pinnate leaf</b></p>  <p><b>Bi-pinnate</b></p> 	<p>examples of simple leaves.</p> <p>3. Draws the different structures of compound leaves</p>	<p>meaning of words related to leaf venation e.g. pinnate, bipinnate and trifoliate</p> <p>2. Reads, internalize and writes texts and questions related to compound leaves</p>	<p>Discussion</p> <p>observation</p>	<p>Mentioning examples of comp. leaves.</p> <p>Drawing the structure of simple leaves</p>	<p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>leaves brought in the class</p>	<p>Int. sci. syllabus bk 4</p>	
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				<div><div>Trifoliate</div><div>Digitate</div><div></div><div></div></div>								
6	Plant life	Transpiration the rate of transpiration.	<p><b>TRANSPIRATION</b></p> <p>- Transpiration is the process by which plants lose water in form of water vapour to the atmosphere.</p> <p><b>Importance of transpiration</b></p> <p><b>a) To a plant</b></p> <ol style="list-style-type: none"><li>1. It cools the plant.</li><li>2. It enables plants to absorb more water from the soil.</li></ol> <p><b>b) To the environment</b></p> <p><input type="checkbox"/> It helps in the formation of rain</p> <div><div></div><div>fall.</div></div>	<p><b>The learner;</b></p> <ol style="list-style-type: none"><li>1. Defines transpiration.</li><li>2. Gives the importance of transpiration to;<ol style="list-style-type: none"><li>i) Plants</li><li>ii) Animals.</li></ol></li></ol>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to transpiration 2. Reads, internalize and writes texts and questions related to transpiration.</p>	<p>Guided discovery</p> <p>Discussion</p> <p>observation</p>	<p>Defining transpiration.</p> <p>Giving the importance of transpiration to plants and the environment.</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>The local environment</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>		





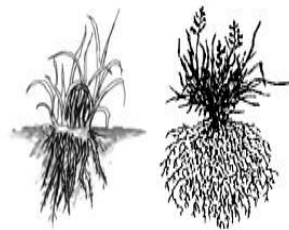
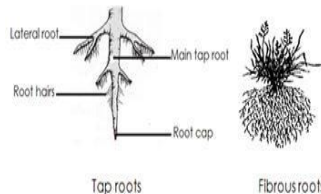
2	1	Plant life		<p><b>PHOTOSYNTHESIS</b></p> <p>☐ Photosynthesis is the process by which plants make their own food.</p> <p><b>Requirements for photosynthesis</b></p> <ol style="list-style-type: none"> <li>1. Water</li> <li>2. Carbon diuoxide</li> <li>3. Sunlight</li> <li>4. Chlorophyll</li> </ol> <p><b>The raw materials for photosynthesis</b></p> <ol style="list-style-type: none"> <li>1. water</li> <li>2. carbon dioxide.</li> </ol> <p><b>Conditions necessary for Photosynthesis</b></p> <ol style="list-style-type: none"> <li>1. Chlorophyll</li> <li>2. Sunlight</li> </ol> <p><b>1. Importance of photosynthesi to people</b></p> <ol style="list-style-type: none"> <li>1. Due to photosynthesis, people get food.</li> <li>2. People get oygen for respiration due to</li> </ol>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Defines the term photosynthesis.</li> <li>2. Mentions the requirements for photosynthesis.</li> <li>3. Describes the conditions, raw materials, product and by product for photosynthesis.</li> </ol>	<p><b>The learner;</b> 1.</p> <ol style="list-style-type: none"> <li>1. Pronounces, spells, reads writes and demonstrates meaning of words related to photosynthesis e.g. chlorophyll, sunlight &amp; water.</li> <li>2. Reads, internalize and writes texts and questions related to Photosynthesis</li> </ol>	<p>Guided discovery</p> <p>Discussion</p> <p>Observati on</p> <p>Brain storming</p> <p>Think pair and share</p>	<p>Defining photosynth esis.</p> <p>Mentioning the requireme nts for photosynth esis.</p> <p>Describing the conditions, raw product and bi products of photosynth esis.</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>The local environ ment</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllab us bk 4</p>	
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				photosynthesis.								
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2	2	Plant life	Uses of leaves	<b>Functions (uses) of leaves to plants</b> <ul style="list-style-type: none"> <li>□ Leaves make food for the plant.</li> <li>□ Leaves help a plant to carry out transpiration.</li> <li>□ Some leaves store food and water for the plant e.g. onions</li> <li>□ Some leaves are used for plant propagation e.g. bryophyllum</li> </ul> <b>Uses of leaves to people</b> <ul style="list-style-type: none"> <li>□ Some leaves are eaten as food e.g. Amaranthus.</li> <li>□ Some leaves are used as herbal medicine.</li> <li>□ Some leaves are used to thatch houses.</li> <li>□ Plant leaves are used for research and study purposes.</li> </ul>	<b>The learner</b> <ol style="list-style-type: none"> <li>1. Gives the uses of leaves to people.</li> <li>2. Mentions the importance of leaves to plants.</li> </ol>	<b>The learner</b> <ol style="list-style-type: none"> <li>1. Pronounces, spells, reads writes and demonstrates meaning of words related to uses of leaves.</li> <li>2. Reads, internalize and writes texts and questions related to uses of leave</li> </ol>	Guided discovery  Discussion  Observati on  Brain storming	Giving the uses of leaves to people.  Mentioning the uses of leaves to plants.	Appreciation Care  Awareness  Fluency  Concern	The local environ ment          	Mk. Int. sci. pbk 4          Int. sci. syllab us bk 4	
2	3	Plant	roots	Root system	The learner;	The learner	Guided	Naming	Appreciati-	Grass	Mk.	

[illegible]

				<p><b>b) Fibrous root system</b></p> <p><input type="checkbox"/> This is the type of root system where there are many roots growing randomly from</p>							
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				<p>the radicle of a seed</p> <p><b>Illustration</b></p> 								
2	4	Plant life	Types of root	<p><b>TYPES OF ROOTS</b></p> <p>1. Primary roots</p> <p>2. Secondary roots</p> <p><b>a) Primary roots</b></p> <p>□ These are roots that develop from the radicle of a germinating seed.</p> <p><b>Examples of primary roots</b></p> <p>1. Tap roots</p>  <p>2. Fibrous roots</p> <p><b>b) Secondary roots (adventitious roots)</b></p>	<p><b>The learner;</b></p> <p>1. Identifies the types of roots.</p> <p>2. Describes primary and secondary roots.</p> <p>3. Mentions examples of primary and secondary roots.</p> <p>4. Draws the structure of a prop root.</p>	<p><b>The learner</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to types of roots 2. Reads, internalize and writes texts and questions related to types of roots.</p>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p> <p>Brain storming</p>	<p>Identifying the types of roots.</p> <p>Describing primary and secondary roots.</p> <p>Mentioning examples of primary and secondary roots.</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>Cassava tubers, sweet potato tubers, carrots</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	

				<div><div><div><div></div><div>These are roots that develop from any other part of the plant other than the radicle. <b>Examples of adventitious roots</b></div><div><div>1. Prop root</div><div>2. Stilt roots</div><div>3. Buttress roots</div><div>4. Storage roots</div><div>5. Clasping roots</div><div>6. Breathing roots</div></div></div></div></div>								
2	5	Plant life	Uses of roots	<div><div><b>USES OF ROOTS TO PLANTS</b><div><div></div><div>Roots fix the plant firmly in to the soil.</div><div></div><div>They absorb water from the soil.</div><div></div><div>Some roots store food for the plant.</div></div><div><b>Uses of roots to man</b><div><div>- Some roots act as food.</div><div>- Some roots are used as herbal medicine.</div><div>- Some roots</div></div></div></div></div>	<div><div><b>The learner;</b><div>1. states the uses of roots the plant, man and the soil/ environment</div></div><div><b>The learner;</b><div>1. states the uses of roots the plant, man and the soil/ environment</div></div></div>	<div><div><b>The learner</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to uses of roots 2. Reads, internalize and writes texts and questions related to uses of roots.</div></div>	<div><div>Guided discovery</div><div>Discussion</div><div>Observation</div><div>Brain storming</div></div>	<div><div>Stating the uses of roots to plants, people and soil.</div></div>	<div><div>Appreciation.</div><div>Care</div><div>Awareness</div><div>Fluency</div><div>Concern</div></div>	<div><div>Cassava tubers, sweet potato tubers, carrots.</div></div>	<div><div>Mk. Int. sci. pbk 4</div><div>Int. sci. syllabus bk 4</div></div>	

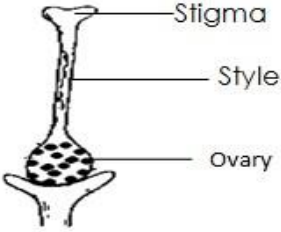
				<p>provide fire wood to people when dry.</p> <ul style="list-style-type: none"><li>- Some roots are sold for money.</li></ul> <p><b>Uses of roots to man</b></p> <ul style="list-style-type: none"><li>- Roots hold the soil particles together hence controlling soil erosion.</li></ul>								
2	6	Plant life	Stems	<p><b>Stems</b></p> <p><b>Types Of Stems</b></p> <ol style="list-style-type: none"><li>1. Upright or erect stems</li><li>2. Underground stems</li><li>3. Weak stems.</li></ol> <p><b>1. Upright Or Erect stems.</b></p> <ul style="list-style-type: none"><li>□ They grow straight in space e.g. woody plants,</li></ul> <p><b>2. Underground or storage stems</b></p> <ul style="list-style-type: none"><li>□ These are stems</li></ul>	<p><b>The learner;</b></p> <ol style="list-style-type: none"><li>1. Names the types of stems</li><li>2. Gives the examples of the different types of stems.</li><li>3. Describes the categories of underground stems.</li></ol>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to stems. 2. Reads, internalize and writes texts and questions related to stems</p>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p> <p>Brain</p>	<p>Naming the types of stems.</p> <p>Giving examples of the different types of stems.</p> <p>Describing the different</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>Different types of stems availed in class.</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	

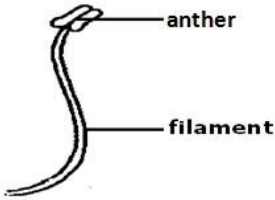
				<p>which grow underground and store food e.g. Stem tubers, Bulbs &amp; Rhizomes</p> <p><b>Characteristics of underground STEMS</b></p> <p><input type="checkbox"/> They have scale leaves. <b>Categories of underground stems</b> a) <b>Stem tubers</b> e.g. white yams and Irish potatoes. b) <b>Corms</b> e.g. cocoyam, crocus and gladiolus. c) <b>Bulbs</b> e.g. onions, garlic and Spider lily d) <b>Rhizomes</b> e.g. ginger, turmeric, cannalilly and grass such as coach grass.</p>			storming	categories of underground stems.				
2	7	Plant life	Stems	<p><b>Weak stems</b></p> <p><input type="checkbox"/> These are weak stems which</p>	<p><b>The learner;</b></p> <p>1. Describes weak stems.</p>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes</p>	Guided discovery	Describing plants with weak	Appreciation.	Different types of	Mk. Int. sci.	




				<p>cannot support themselves upright.</p> <p><input type="checkbox"/> To get enough sunlight. <b>Groups of weak stems</b></p> <p>1. Climbing stems e.g. passion fruits,</p> <p>2. Creeping stems <b>How weak stems climb others</b></p> <p><b>1. By using tendrils</b></p> <p><input type="checkbox"/> The lateral bud of a plant or the leaf tip develops into a tendril. <b>Examples of plants which use tendrils</b> Passion fruits, gourds, cowpeas, pumpkins, cucumber</p> <p><b>2. By using hooks</b></p> <p><input type="checkbox"/> Some plants have downward pointing thorns. <b>3. By twining or clasping.</b></p> <p><input type="checkbox"/> Plants clasp their stems around a support.</p>	<p>2. Gives examples of weak stems.</p> <p>3. Mentions ways plants with weak stems use to climb others.</p>	<p>and demonstrates meaning of words related to stems e.g. erect, weak stems and underground stems.</p> <p>2. Reads, internalize and writes texts and questions related to stems.</p>	<p>Discussion</p> <p>Observation</p> <p>Brain storming</p>	<p>stems.</p> <p>Giving examples of plants with weak stems.</p> <p>Mentioning ways used by weak stems to climb others.</p>	<p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>stems availed in class.</p>	<p>pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
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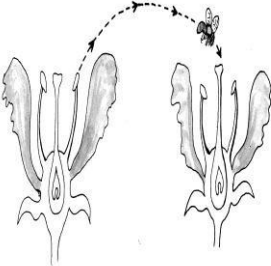
3	1	Plant life	Functions of stems	<p><b>FUNCTIONS OF A STEM TO A PLANT</b></p> <ol style="list-style-type: none"> <li>1. They hold the leaves on a plant.</li> <li>2. They hold the flowers for proper pollination.</li> </ol> <p><b>USES OF STEMS TO ANIMALS</b></p> <ol style="list-style-type: none"> <li>1. Most stems are used for timber and firewood.</li> <li>2. Some stems are used as herbal medicines.</li> <li>3. Stems are used as food for animals.</li> <li>4. People use stems as firewood.</li> </ol>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. gives the uses of stems to ;</li> <li>a) plants</li> <li>b) people</li> <li>c) animals</li> </ol>	<p><b>The learner;</b> 1.</p> <p>Pronounces, spells, reads writes and demonstrates meaning of words related to stems e.g. erect, weak stems and underground stems.</p> <p>2. Reads, internalize and writes texts and questions related to functions of stems</p>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p> <p>Brain storming</p>	<p>Giving the uses of stems to plants, people and animals..</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>Weak stems collected from the environment.</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
3	2	Plant life	flowers	<p><b>FLOWERS</b></p> <p>□ A flower is a reproductive part of a flowering plant.</p> <p><b>The external</b></p>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Defines a flower.</li> <li>2. Draws the internal parts of a flower.</li> <li>3. Name parts of</li> </ol>	<p><b>The learner;</b> 1.</p> <p>Pronounces, spells, reads writes and demonstrates meaning of words related to parts of a flower.</p>	<p>Guided discovery</p> <p>Discussion</p>	<p>Defining a flower.</p> <p>Drawing and labeling</p>	<p>Appreciation.</p> <p>Care</p>	<p>Flowers from the environment.</p>	<p>Mk. Int. sci. pbk 4</p>	

				<p><b>structure of a flower</b></p> <ul style="list-style-type: none"> <li>- Sepals</li> <li>- petals</li> </ul> <p><b>The internal structure of a flower</b></p> <ul style="list-style-type: none"> <li>- pistil</li> <li>- stamen</li> </ul>  <p><b>a) Pistil</b></p> <p><b>b). The Stamen</b></p> <p>□ The stamen is the male part of a flower.</p>	a flower.	2. Reads, internalize and writes texts and questions related to parts of a flower.	<p>Observation</p> <p>Brain storming</p>	the parts of a flower.	<p>Awareness</p> <p>Fluency</p> <p>Concern</p>		Int. sci. syllabus bk 4	
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				 <p><b>Illustration</b></p>								
3	3	Plant life	Functions of parts of a	<b>FUNCTIONS OF EACH PART</b> <b>i) Petals</b> □ Petals are	<b>The learner;</b> 1. States the function of each part of a flower.	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates	Guided discovery	Sating the function of each part of a flower.	Appreciation. Care	The environ ment..	Mk. Int. sci. pbk 4	

			<b>flower</b>	<p>brightly coloured to attract pollinators</p> <p><b>Pistil or Carpel</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The pistil is the female part of a flower</li> <li><input type="checkbox"/> It is made up of three main parts; namely Ovary, Stigma and Style</li> </ul> <p><b>USES OF FLOWERS TO PEOPLE</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Flowers are used to get insecticides.</li> <li><input type="checkbox"/> They are used for decoration on various functions.</li> <li><input type="checkbox"/> They are used to get dye.</li> <li><input type="checkbox"/> Flowers are used to make perfumes.</li> </ul>		<p>meaning of words related to parts of a flower.</p> <p>2. Reads, internalize and writes texts and questions related to parts of a flower.</p>	<p>Discussion</p> <p>Observation</p> <p>Brain storming</p>		<p>Awareness</p> <p>Fluency</p> <p>Concern</p>		<p>Int. sci. syllabus bk 4</p>	
<b>3</b>	<b>4</b>	<b>Plant life</b>	<b>Pollination</b>	<p><b>POLLINATION</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Pollination is the</li> </ul>	<b>The learner</b> 1. Defines	<b>The learner;</b> 1. Pronounces,	Guided discovery	Defining pollination.	Appreciation.	Flowers from	Mk. Int.	

				<p>transfer of pollen grains from the anthers to the stigma.</p> <p><b>TYPES OF POLLINATION</b></p> <ol style="list-style-type: none"> <li>1. Self-pollination</li> <li>2. Cross pollination</li> </ol> <p><b>Self-pollination</b></p> <ul style="list-style-type: none"> <li>□ This is the transfer of pollen grains from the anthers of a flower to the stigma of the same flower or another flower on the same plant.</li> </ul> <p><b>Illustration</b></p>  <p><b>HOW THE FLOWER IS ADAPTED (SUITED) FOR SELF POLLINATION</b></p> <ul style="list-style-type: none"> <li>□ The anthers and stigma mature at the same time e.g. the conifers.</li> <li>□ The flower remains</li> </ul>	<p>pollination.</p> <ol style="list-style-type: none"> <li>2. Names and describes the types of pollination.</li> <li>3. States the adaptation of some flowers to self pollination.</li> </ol>	<p>spells, reads writes and demonstrates meaning of words related to pollination. 2. Reads, internalize and writes texts and questions related to pollination.</p>	<p>Discussion</p> <p>Observation</p> <p>Brain storming</p>	<p>Naming the types of pollination.</p> <p>Describing self pollination.</p> <p>Stating the adaptation of some flowers to self pollination.</p>	<p>Care Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>the environment.</p> <p>A chart showing an illustration of self pollination.</p>	<p>sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
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				closed until selfpollination has taken place e.g. the conifers								
<b>3</b>	<b>5</b>	<b>Plant life</b>	<b>Cross pollination</b>	<p><b>Cross pollination</b></p> <p>□ This is the transfer of pollen grains from the anthers of a flower to the stigma of another flower on another plant of the same species.</p>  <p><b>Illustration</b></p> <p><b>HOW THE FLOWER IS ADOPTED (SUITED)</b></p>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Describes cross pollination.</li> <li>2. States the adaptation f some flowers to cross pollination.</li> <li>3. Identifies the agents of pollination.</li> </ol>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to cross pollination. 2. Reads, internalize and writes texts and questions related to cross pollination.</p>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p> <p>Brain storming</p>	<p>Describing cross pollination.</p> <p>Stating the adaptation of some flowers to cross pollination.</p> <p>Identifying the agents of pollination.</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>Flowers from the environ ment.</p> <p>A chart showin g cross pollinati on</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllab us bk 4</p>	

				<b>FOR CROSS POLLINATION</b> <input type="checkbox"/> The male and female flowers occur on the same plant e.g. in maize <input type="checkbox"/> The male and								
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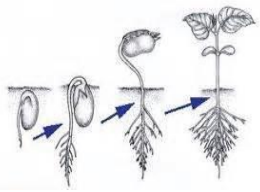
				<p>female flowers occur on separate plants e.g. in papaws.</p> <p><b>AGENTS OF POLLINATION</b></p> <p><input type="checkbox"/> Agents of pollination are things responsible for the transfer of pollen grains to the stigma.</p> <p><b>Agents of pollination</b></p> <ol style="list-style-type: none"> <li>1. Insects</li> <li>2. wind</li> <li>3. water</li> <li>4. Animals e.g. bats</li> <li>5. Birds</li> </ol>								
3	6	Plant life	<p><b>CCCs of insect/wind pollinated flowers</b></p>	<p><b>CHARACTERISTICS OF INSECT POLLINATED FLOWERS</b></p> <p><input type="checkbox"/> They are scented flowers.</p> <p><input type="checkbox"/> They produce less sticky pollen.</p> <p><input type="checkbox"/> They are have brightly coloured petals.</p> <p><input type="checkbox"/></p> <p><b>CHARACTERISTICS OF WIND POLLINATED</b></p>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Mentions the <b>CCCs</b> of wind and insect pollinated flowers.</li> <li>2. States the importance of pollination.</li> </ol>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to pollination. 2. Reads, internalize and writes texts and questions related to pollination.</p>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p>	<p>Mentioning the CCCs of wind and insect pollinated flowers.</p> <p>Stating the importance of pollination.</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>Flowers from the environment.</p> <p>A chart showing cross pollination</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	

				<p><b>FLOWERS.</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The petals have dull colours.</li> <li><input type="checkbox"/> The flowers do not produce nectar.</li> <li><input type="checkbox"/> They produce a lot of pollen grains.</li> </ul> <p><b>IMPORTANCE OF POLLINATION</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Pollination allows fertilization to take place in farmers' crops.</li> <li><input type="checkbox"/> Pollination allows high yield in farmers' harvest.</li> </ul>			Brain storming	Identifying the agents of pollination.				
3	7	Plant life	SEEDS	<p><b>SEEDS</b> A seed is a fertilized mature ovule. <b>Classification of seeds</b></p> <ul style="list-style-type: none"> <li>a) Monocotyledonous seeds</li> <li>b) Dicotyledonous seeds</li> </ul> <p><b>Monocotyledonous</b></p>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Defines a seed.</li> <li>2. Mentions types of seeds.</li> <li>3. Describes monocotyledonous seeds.</li> <li>4. States the CCCs of monocots with relevant</li> </ol>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to seeds like dicot and monocots. 2. Reads, internalize and writes texts and</p>	<p>Guided discovery</p> <p>Discussion</p>	<p>Defining a seed.</p> <p>Mentioning the types of seeds.</p> <p>Describing monocotyl</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p>	<p>Different grains such as maize, millet, sorghum.</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci.</p>	

				<p>☐ Monocotyledonous seeds are seeds that have one cotyledon.</p> <p><b>Examples of monocotyledonous seeds</b></p> <ol style="list-style-type: none"> <li>1. maize</li> <li>2. millet</li> <li>3. sorghum</li> <li>4. barley</li> <li>5. rice</li> </ol> <p><b>A structure of maize grain</b></p>	examples.	questions related to seeds	<p>Observation</p> <p>Brain storming</p>	<p>edonous seeds.</p> <p>Stating the CCCs of Monocots with relevant examples.</p>	Concern		syllabus bk 4	
4	1	Plant life	Dicotyledonous	<p><b>Dicotyledonous seeds</b></p> <p>☐ These are seeds that have two cotyledons.</p> <p><b>Examples include</b></p> <ol style="list-style-type: none"> <li>1. beans</li> <li>2. peas</li> <li>3. soya</li> <li>4. Ground nuts</li> </ol> <p><b>A structure of a bean seed</b></p> <p><b>Functions of each part</b></p>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Describes dicotyledonous seeds.</li> <li>2. Gives examples of dicotyledonous seeds.</li> <li>3. States the CCC of dicotyledonous seeds.</li> </ol>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to dicotyledonous seeds.</p> <p>2. Reads, internalize and writes texts and questions related to dicotyledonous seeds.</p>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p>	<p>Describing dicotyledonous seeds.</p> <p>Giving examples of dicotyledonous seeds.</p> <p>Stating the CCCs of</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>Bean seeds, soya or ground nut seeds.</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	

				<ol style="list-style-type: none"> <li>1. <b>Plumule</b> – develops into shoot system</li> <li>2. <b>Radicle</b> – develops into root system</li> <li>3. <b>Testa</b>– protects the internal parts from damage.</li> <li>4. <b>Cotyledon</b>- It stores food for the seed.</li> <li>5. <b>Endosperm</b> stores food for the embryo</li> </ol>			Brain storming	dicotyledonous seeds				
4	2	Plant life	Seed Germination	<b>Seed Germination</b> <input type="checkbox"/> Germination is the development of a seed embryo into a young plant. <input type="checkbox"/> A seedling is a young plant <b>Condition for germination</b> <b>Water</b> - Softens the testa for the radicle to come out. <b>Warmth</b> - for respiration <b>Oxygen</b> - provides the right temperature	<b>The learner;</b> <ol style="list-style-type: none"> <li>1. Defines the term germination.</li> <li>2. Mentions the conditions for seed germination.</li> <li>3. Describes the importance of each condition necessary for seed germination.</li> </ol>	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to seed germination 2. Reads, internalize and writes texts and questions related to Seed germination.	Guided discovery  Discussion  Observation  Brain	Defining the term germination.  Mentioning the conditions for seed germination.  Describing the	Appreciation.  Care  Awareness  Fluency  Concern	Germinating seeds.  A chart showing seed germination.	Mk. Int. sci. pbk 4  Int. sci. syllabus bk 4	

				<p>for the germinating seed.</p> <p><b>Steps under gone by a seed during germination</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The seed absorbs water through the micropyle and swells.</li> <li><input type="checkbox"/> Testa softens swells and opens for the radicle to pass out.</li> <li><input type="checkbox"/> The radicle comes out of the seed to form the root system.</li> <li><input type="checkbox"/> The Plumule comes out to grow into the shoot system.</li> </ul>			storming	importanc e of each condition of seed germinatio n.				
<b>4</b>	<b>3</b>	<b>Plant life</b>	<b>Types of germination</b>	<p><b>Types of germination</b></p> <ul style="list-style-type: none"> <li>- Epigeal germination</li> <li>- Hypogeal germination</li> </ul> <p><b>Epigeal germination</b></p> <ul style="list-style-type: none"> <li>- This is the type in which the cotyledon comes out of the ground.</li> </ul> <p><b>A bean seed</b></p>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. The learner identifies the types of germination.</li> <li>2. Describes each type of germination.</li> <li>3. Illustrates to show the two types of germination.</li> <li>4. Mentions</li> </ol>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to seed germination 2. Reads, internalize and writes texts and questions related to Seed germination.</p>	<p>Guided discovery</p> <p>Discussion</p> <p>Observati</p>	<p>Identifying the types of seed germination.</p> <p>Describing epigeal germination.</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p>	<p>A chart showing seed germination.</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk</p>	

				 <p><b>Examples of seeds that undergo epigeal germination</b> Beans Ground nuts</p> <p><b>Hypogeal germination</b> - This is type of germinations in which a cotyledon remains under ground.</p> <p><b>Illustration</b></p> <p><b>Examples of seeds that undergo hypogeal germination</b> Maize Rice</p>	examples of seeds that undergo each type of germination.		on  Brain storming	<p>Illustrating the types of seed germination.</p> <p>Mentioning examples of seeds that undergo each type of seed germination.</p>	Concern		4	
4	4	Plant life	Seed viability and seed dormancy	<p><b>Seed viability and seed dormancy</b> - Seed viability is the ability of a seed to germinate given the necessary conditions.</p> <p><b>Characteristics of</b></p>	<p><b>The learner;</b> 1. Defines seed viability. 2. States the <b>CCCs</b> of a viable seed. 3. Gives the meaning of</p>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words seed viability and seed dormancy germination</p>	<p>Guided discovery</p> <p>Discussion</p>	<p>Defining seed viability.</p> <p>Stating the <b>CCCs</b> of a viable</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p>	<p>A chart showing an experiment on seed viability seed vi</p>	<p>Mk. Int. sci. pbk 4</p>	

				<b>seed viability</b> <input type="checkbox"/> They should be mature. <input type="checkbox"/> They should be free from pest damage. <b>Factors that make a seed fail to germinate</b> <input type="checkbox"/> When the seed has holes. <input type="checkbox"/> When the embryo is not mature. <b>Experiment on seed viability</b>	seed dormancy. 4. States the factors that may make a seed fail to germinate under normal conditions.	2. Reads, internalize and writes texts and questions related to seed viability and seed dormancy	Observation       Brain storming	seed.  Giving the meaning of seed dormancy.  Stating the factors that may make a seed fail to germinate.	Fluency  Concern		Int. sci. syllabus bk 4	
4	5	Plant life	Uses of plants	<b>Uses of plants to people</b> <input type="checkbox"/> Some plants are sources of food. <input type="checkbox"/> Some plants are used as herbal medicine. <input type="checkbox"/> Coniferous plants are used for decorating live fences. <input type="checkbox"/> Plants provide firewood and charcoal. <input type="checkbox"/> Some plants	<b>The learner;</b> 1. state the uses of plants to people	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related seed viability and seed dormancy germination 2. Reads, internalize and writes texts and questions related to seed viability and seed	Guided discovery    Discussion    Observation	Stating the uses of plants to people..	Appreciation.  Care   Awareness    Fluency  Concern	Environment	Mk. Int. sci. pbk 4          Int. sci. syllabus bk 4	

				<p>provide hard wood for timbers.</p> <p><input type="checkbox"/> Plants provide oxygen to animals. <b>Uses of plants to animals</b></p> <p><input type="checkbox"/> Some plants provide food to animals.</p> <p><input type="checkbox"/> Plants provide shelter to some animals.</p> <p><input type="checkbox"/> Plants provide animals with oxygen for respiration.</p> <p><b>Importance of plants to the environment</b></p> <p><input type="checkbox"/> Plants help in the formation of rainfall.</p> <p><input type="checkbox"/> Plants help to purify air by absorbing carbon dioxide.</p>		dormancy	Brain storming						
4	6	Growi ng crops	crops	<p><input type="checkbox"/> A crop is a plant that is grown and cared for a particular purpose.</p> <p><b>Groups of crops (categories of</b></p>	<p><b>The learner;</b></p> <p>1. Names the examples of common crops.</p> <p>2. Identifies the</p>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to crops.</p>	Guided discovery	<p>Naming examples of crops.</p> <p>Identifying</p>	Appreciation. Care	Environ ment	Mk. Int. sci. pbk 4		



				<b>crops)</b> 1. Annual crops 2. perennial crops <b>a) Annual crops:</b> These are crops which mature and harvested within one year. <b>Examples of annual crops</b> Sun flower sorghum Beans Peas maize Ground nuts <b>Perennial crops:</b> These are crops that are harvested year after year. <b>Examples of perennial crops</b> Coffee crop tea crop banana crop.	groups of crops.  3. Mention examples of crops under each group.	2. Reads, internalize and writes texts and questions related to crops.	Discussion  Observation  Brain storming	the groups of crops.  Mentioning examples of crops under each group.	Awareness  Fluency  Concern		Int. sci. syllabus bk 4	
4	7	Crop growing	Garden tools	<b>Garden tools</b> <b>Examples of garden tools.</b> <ul style="list-style-type: none"> <li>- Hoe</li> <li>- Spade</li> <li>- Axe</li> <li>- Rake</li> </ul>	<b>The learner;</b> 1. mentions the common tools Draws their structures and states their uses.	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to garden tools	Guided discovery  Discussion	Mentioning the common tools.  Drawing	Appreciation.  Care  Awareness	Illustrations of different garden tools.	Mk. Int. sci. pbk 4	

				<ul style="list-style-type: none"> <li>- Wheel barrow</li> <li>- Watering can</li> <li>- Slasher</li> </ul> <p><b>Their structure and uses.</b></p>		2. Reads, internalize and writes texts and questions related to garden tools.	Observati on  Brain storming	the structure of different garden tools.  Stating the uses of different garden tools.	Fluency  Concern	Where possible , real garden tools brought to class.	Int. sci. syllab us bk 4	
5	1	Crop growin g	More garde n tools	<p><b>More Garden tools</b> <b>Examples of garden tools.</b></p> <ul style="list-style-type: none"> <li>- Forked hoe</li> <li>- Watering can</li> <li>- Trowel</li> <li>- Garden fork</li> <li>- Pick axe</li> </ul> <p><b>Their structure and uses.</b></p>	<p><b>The learner;</b> 1. mentions the common tools 2. Draws their structures and states their uses.</p>	<p><b>The learner; 1.</b> Pronounces, spells, reads writes and demonstrates meaning of words related to garden tools 2. Reads, internalize and writes texts and questions related to garden tools.</p>	Guided discovery  Discussion  Observati on  Brain storming	Mentioning the common tools.  Drawing the structure of different garden tools.  Stating the uses of different garden tools.	Appreciation.  Care  Awareness  Fluency  Concern	Illustrati ons of differen t garden tools.  Where possible , real garden tools brought to class.	Mk. Int. sci. pbk 4  Int. sci. syllab us bk 4	
5	2	Crop growin	More garde	<b>More Garden tools</b> <b>Examples of garden</b>	<b>The learner;</b> 1. mentions the	<b>The learner;</b> 1. Pronounces,	Guided discovery	Mentioning the	Appreciation.	Illustrati ons of	Mk. Int.	

		<b>g</b>	<b>n tools</b>	<b>tools.</b> <ul style="list-style-type: none"> <li>- More garden tools</li> <li>- Secateur</li> <li>- Pruning saw</li> <li>- Knives</li> <li>- Sickle</li> </ul> <b>Their structure and uses.</b>	common tools 2. Draws their structures and states their uses.	spells, reads writes and demonstrates meaning of words related to garden tools 2. Reads, internalize and writes texts and questions related to garden tools.	Discussion           Observati on           Brain storming	common tools.   Drawing the structure of different garden tools.   Stating the uses of different garden tools.	Care   Awareness   Fluency   Concern	differen t garden tools.   Where possible , real garden tools brought to class.	sci. pbk 4   Int. sci. syllab us bk 4	
5	3	<b>Crop growin g</b>	<b>Caring for garde n tools</b>	<b>Caring for garden tools</b> <ul style="list-style-type: none"> <li>□ By cleaning them after use.</li> <li>□ By keeping them in a cool dry place.</li> <li>□ By using the tools for their rightful purposes.</li> </ul> <b>Rusting</b> <ul style="list-style-type: none"> <li>□ Rusting is a process by which iron combines with oxygen and moisture to form</li> </ul>	<b>The learner;</b> <ol style="list-style-type: none"> <li>1. Mentions ways of caring for garden tools.</li> <li>2. Describes the conditions for rusting.</li> <li>3. Identifies the ways of preventing rusting.</li> </ol>	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to care for garden tools 2. Reads, internalize and writes texts and questions related to care for garden tools.	Guided discovery           Discussion           Observati on	Mentioning the common tools.   Drawing the structure of different garden tools.   Stating the uses of	Appreciation.   Care   Awareness   Fluency   Concern	Lubricat ing oil and grease brought to class.	Mk. Int. sci. pbk 4   Int. sci. syllab us bk 4	

				<p>a brown coloured substance called rust.</p> <p><b>Conditions that favour rusting to take place</b></p> <ol style="list-style-type: none"> <li>1. Oxygen</li> <li>2. Moisture</li> </ol> <p><b>Dangers of rusting on metals</b></p> <ol style="list-style-type: none"> <li>1. Rusting makes tools weak and worn out.</li> <li>2. Rusting makes some tools blunts thus leading to wearing due to increased friction.</li> </ol> <p><b>Control of rusting</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> By painting metallic garden tools.</li> <li><input type="checkbox"/> By keeping tools in cool dry places.</li> <li><input type="checkbox"/> By oiling or greasing some tools.</li> </ul>			Brain storming	different garden tools.				
5	4	Crop growing	Crop Growing Practic	<p><b>Crop Growing Practices</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Crop growing practices are</li> </ul>	<p><b>The learner,</b></p> <ol style="list-style-type: none"> <li>1. Mentions the crop growing practices.</li> </ol>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates</p>	Guided discovery	Mentioning the crop growing practices.	Appreciation. Care	The environment	Mk. Int. sci. pbk 4	

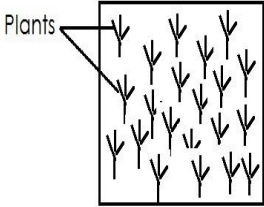
			<b>es</b>	<p>activities involved in the production of food e.g.</p> <ol style="list-style-type: none"> <li>1. Land preparation</li> <li>2. Selecting seeds for planting</li> <li>3. Planting or sowing</li> <li>4. Transplanting</li> </ol> <p><b>Land preparation</b></p> <ul style="list-style-type: none"> <li>- This is the first stage in a food path usually done in the dry season.</li> </ul> <p><b>Activities involved during land preparation</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Cutting down trees using an axe or panga.</li> <li><input type="checkbox"/> Controlled bush burning.</li> </ul> <p><b>Ploughing land</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> It is done using a tractor, oxplough, hoes, and forked hoe.</li> <li><input type="checkbox"/> Ploughing the land is done to make the soil loose and soft</li> </ul>	<ol style="list-style-type: none"> <li>2. Describes land preparation.</li> <li>3. States the different activities done during land preparation.</li> </ol>	<p>meaning of words related to crop growing practices.</p> <ol style="list-style-type: none"> <li>2. Reads, internalize and writes texts and questions related to crop growing practices.</li> </ol>	<p>Discussion</p> <p>Observation</p> <p>Brain storming</p>	<p>Describing land preparation</p> <p>Stating the different activities done during land preparation</p>	<p>Awareness</p> <p>Fluency</p> <p>Concern</p>		<p>Int. sci. syllabus bk 4</p>	
<b>5</b>	<b>5</b>	<b>Crop growin</b>		<p><b>Planting</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> This refers to</li> </ul>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Describe the</li> </ol>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Pronounces,</li> </ol>	<p>Guided discovery</p>	<p>Describing the term</p>	<p>Appreciation.</p>	<p>The school</p>	<p>Mk. Int.</p>	

		g		<p>putting seeds in holes and covering with soil.</p> <p><b>Example of planting materials</b></p> <ul style="list-style-type: none"> <li>- Seeds, suckers, stem cuttings, bulbs</li> </ul> <p><b>Qualities of good planting materials</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> They should be mature and healthy.</li> <li><input type="checkbox"/> The seeds should not be broken.</li> <li><input type="checkbox"/> They should be of desired characteristics.</li> </ul> <p><b>Methods of planting</b></p> <p>1. <b>Row planting.</b> This is the planting of seeds</p> <div data-bbox="434 957 689 1158" data-label="Image"> </div> <p>or crops in lines.</p>	<p>term planting.</p> <p>2. Mentions examples of planting materials.</p> <p>3. Identifies the methods of planting.</p>	<p>spells, reads writes and demonstrates meaning of words related to planting</p> <p>2. Reads, internalize and writes texts and questions related to planting.</p>	<p>Discussion</p> <p>Observation</p> <p>Brain storming</p>	<p>planting</p> <p>Mentioning examples of planting materials.</p> <p>Identifies the methods of planting.</p>	<p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>dem. Garden .</p>	<p>sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
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5	6	Crop growin g	Advan tages of raw plantin g	<b>Advantages of raw planting method</b> <input type="checkbox"/> It makes weeding easy. <input type="checkbox"/> It controls easy	<b>The learner;</b> 1. States the advantages and disadvantages	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words	Guided discovery	Stating the advantage and disadvanta ges of row	Appreciation.  Care	The school dem. Garden .	Mk. Int. sci. pbk 4	

			<b>method</b>	<p>spread of diseases and pests.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> It makes harvesting easy.</li> <li><input type="checkbox"/> It prevents wastage of seeds and other planting materials.</li> <li><input type="checkbox"/> It allows proper spacing of crops.</li> </ul> <p><b>Disadvantages of raw planting</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> It needs a lot of labour.</li> <li><input type="checkbox"/> It is allows proper spacing of crops.</li> </ul> <p><b>Examples of crops planted by raw planting</b></p> <ol style="list-style-type: none"> <li>1. Maize</li> <li>2. Pineapples</li> <li>3. Beans</li> <li>4. Potatoes</li> <li>5. Cassava</li> </ol>	<p>of raw planting.</p> <p>2. Mentions examples of crops that can be planted in rows.</p>	<p>related to row planting 2.</p> <p>Reads, internalize and writes texts and questions related to row planting</p>	<p>Discussion</p> <p>Observation</p> <p>Brain storming</p>	<p>planting.</p> <p>Mentioning examples of crops that can be planted in rows.</p>	<p>Awareness</p> <p>Fluency</p> <p>Concern</p>		<p>Int. sci. syllabus bk 4</p>	
<b>5</b>	<b>7</b>	<b>Crop growing</b>	<b>Broadcasting</b>	<p><b>Broadcasting</b></p> <p>- This is the planting of seeds by throwing them using the hand in a garden.</p>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. The learner describes broadcasting method.</li> <li>2. States the advantages</li> </ol>	<p><b>The learner;</b> 1.</p> <p>Pronounces, spells, reads writes and demonstrates meaning of words related to broadcasting</p>	<p>Guided discovery</p> <p>Discussion</p>	<p>Describing the advantage and disadvantages of broadcasti</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p>	<p>The school dem. Garden .</p>	<p>Mk. Int. sci. pbk 4</p>	



				<p><b>Illustration</b></p>  <p><b>Crops planted by broadcasting method</b></p> <ol style="list-style-type: none"> <li>1. Simsim</li> <li>2. Millet</li> </ol> <p><b>Advantages of broadcasting method</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> It saves time.</li> <li><input type="checkbox"/> It does not need a lot of labour.</li> </ul> <p><b>Disadvantages of broadcasting method</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> It can lead to easy spread of diseases.</li> <li><input type="checkbox"/> Many times, crops do not yield as expected.</li> </ul>	<p>and disadvantages of broadcasting method.</p> <p>3. Names the examples of crops that can be planted by broadcasting.</p>	<p>method. 2. Reads, internalize and writes texts and questions related to broadcasting method.</p>	<p>Observation</p> <p>Brain storming</p>	<p>ng method.</p> <p>Stating the advantage and disadvantages of broadcasting method.</p> <p>Naming examples crops that can be broadcast ed.</p>	<p>Fluency</p> <p>Concern</p>		<p>Int. sci. syllabus bk 4</p>	
6	1	Crop growing	A nursery bed	<p><b>A nursery bed</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> A nursery bed is a place where seedlings are raised.</li> </ul>	<ol style="list-style-type: none"> <li>1. Defines a nursery bed.</li> <li>2. Mentions examples of crops that can</li> </ol>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words</p>	<p>Guided discovery</p>	<p>Defining a nursery bed.</p>	<p>Appreciation.</p> <p>Care</p>	<p>The school dem. Garden .</p>	<p>Mk. Int. sci. pbk 4</p>	

				<p><b>Crops that can be raised on a nursery bed</b> Coffee, onions</p> <p><b>Structure of a nursery bed</b></p> <p><b>Importance of a nursery bed</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> It protects seedlings from too much direct sunshine.</li> <li><input type="checkbox"/> It protects seedlings from too much wind and rainfall.</li> </ul> <p><b>Transplanting</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Transplanting is the transfer of seedlings from a nursery bed to the main garden.</li> <li><input type="checkbox"/> Transplanting is best done in the evening because there is little loss of water through transpiration.</li> </ul>	<p>be grown on a nursery bed.</p> <p>3. States the importance of a nursery bed to the seedlings and the farmer.</p>	<p>related to a nursery bed. 2. Reads, internalize and writes texts and questions related to a nursery bed.</p>	<p>Discussion</p> <p>Observation</p> <p>Brain storming</p>	<p>Mentioning examples of crops that can be raised on a nursery bed.</p> <p>States the importance of a nursery bed.</p>	<p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>A chart showing A nursery bed.</p>	<p>Int. sci. syllabus bk 4</p>	
6	2	Crop growing	Ways of caring	<p><b>Ways of caring for plants</b></p> <p>Weeding</p>	<p><b>The learner;</b></p> <p>1. Mentions the different ways of</p>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes</p>	<p>Guided discovery</p>	<p>Mentioning different ways of</p>	<p>Appreciation.</p>	<p>The school dem.</p>	<p>Mk. Int. sci.</p>	

			<p><b>for plants</b></p> <p>Staking Spraying Pruning Thinning <b>Staking</b></p> <p><input type="checkbox"/> Staking is the giving of extra support to the plants with stems.</p> <p><input type="checkbox"/> Staking can be done on</p>  <p>tomatoes.</p> <p><b>Examples of crops that can be staked</b></p>	<p>caring for crops.</p> <p>2. Describes the meaning of staking and propping,</p> <p>4. Names examples of crops that can be staked or propped.</p>	<p>and demonstrates meaning of words related caring for crops.</p> <p>2. Reads, internalize and writes texts and questions related to care for crops.</p>	<p>Discussion</p> <p>Observation</p> <p>Brain storming</p>	<p>caring for crops.</p> <p>Describing the meaning of staking.</p> <p>Naming examples of crops that can be staked.</p>	<p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>Garden .</p> <p>A chart showing A nursery bed.</p>	<p>pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
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				<div>1. Coffee</div> <div>2. Tomatoes</div>								
6	3	Crop growin g	Weedi ng	<b>Weeding</b> a) Weeding is the removal of plants from an area where they are not wanted.	<b>The learner;</b> 1. Defines weeding. 2. Mentions examples of weeds.	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to	Guided discovery	Mentioning different ways of caring for crops.	Appreciation.  Care	The school dem. Garden .	Mk. Int. sci. pbk 4	

				<p><b>Examples of weeds</b></p> <ul style="list-style-type: none"> <li>- nut grass</li> <li>- couch grass</li> </ul> <p><b>Dangers of weeds</b></p> <ul style="list-style-type: none"> <li>- They compete with crops for water and mineral salts</li> <li>- Weeds are hiding places for crop pests.</li> </ul> <p><b>Uses of weeds</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> For feeding some farm animals</li> <li><input type="checkbox"/> For thatching houses</li> </ul> <p><b>Ways of controlling weeds.</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> By uprooting and burning them</li> <li><input type="checkbox"/> By mulching</li> </ul> <p><b>Gap filling</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Gap filling is the planting of seeds or seedlings in places where they did not germinate.</li> </ul>	<p>3. Identifies garden tools used for weeding.</p> <p>4. Mentions dangers of weeds.</p>	<p>weeding. 2. Reads, internalize and writes texts and questions related to weeding</p>	<p>Discussion</p> <p>Observation</p> <p>Brain storming</p>	<p>Describing the meaning of staking.</p> <p>Naming examples of crops that can be staked.</p>	<p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>A chart showing A weeding tool.</p>	<p>Int. sci. syllabus bk 4</p>	
6	4	Crop growing	Thinning and pruning	<p><b>Thinning and</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Thinning is the removal of excess seedlings in the garden.</li> </ul> <p><b>Advantages of</b></p>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Defines thinning and pruning.</li> <li>2. States the advantages of thinning and</li> </ol>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to thinning</p>	<p>Guided discovery</p>	<p>Mentioning different ways of caring for crops.</p>	<p>Appreciation.</p> <p>Care</p>	<p>The school dem. Garden .</p>	<p>Mk. Int. sci. pbk 4</p>	

				<p><b>thinning crops</b></p> <ul style="list-style-type: none"> <li>□ It creates space for crops to grow</li> <li>□ It makes weeding easy</li> </ul> <p><b>Commonly thinned crops</b></p> <ol style="list-style-type: none"> <li>1. Cotton</li> <li>2. Sunflower</li> </ol> <p><b>Pruning</b></p> <ul style="list-style-type: none"> <li>□ Pruning is the removal of unwanted parts of a plant.</li> </ul> <p><b>Garden tools used for pruning</b></p> <ol style="list-style-type: none"> <li>1. secateurs</li> <li>2. pruning saw</li> </ol> <p><b>Reasons why crop farmers prune their crops</b></p> <ul style="list-style-type: none"> <li>□ To remove hiding places for crop pest</li> </ul> <p><b>Plants which are pruned include</b></p> <ol style="list-style-type: none"> <li>1. orange plant</li> <li>2. banana plant</li> </ol>	pruning.	and pruning 2. Reads, internalize and writes texts and questions related to thinning and pruning	Discussion   Observation   Brain storming	Describing the meaning of staking.   Naming examples of crops that can be staked.	Awareness  Fluency  Concern		Int. sci. syllabus bk 4	
6	5	Crop growing	Mulching	<p><b>Mulching</b></p> <ul style="list-style-type: none"> <li>□ Mulching is the covering of top soil with dry plant materials in the</li> </ul>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Defines mulching.</li> <li>2. States the advantages</li> </ol>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words</p>	Guided discovery	Defining mulching.  Stating the advantage	Appreciation.  Care	The school dem. Garden .	Mk. Int. sci. pbk 4	

				garden. <b>Examples of mulches</b> Dry banana leaves <b>Advantages of mulching</b> <input type="checkbox"/> Mulching keeps moisture in the soil <input type="checkbox"/> Mulching controls soil erosion <b>Disadvantages of mulching</b> <input type="checkbox"/> Mulches can easily catch fire and burn crops. <input type="checkbox"/> Mulches are hiding places for crop pests e.g. rats. <b>Manuring</b> <input type="checkbox"/> Manuring is the putting of fertilizers in soil to make it more fertile. <input type="checkbox"/> Or manuring is the act of adding fertilizers into the soil. <b>Importance of manure</b> 1. Manure makes the soli more fertile.	and disadvantages of mulches. 3. Describes manuring. 4. States the importance of manuring.	related to mulching and manuring 2. Reads, internalize and writes texts and questions related to mulching and manuring.	Discussion  Observation  Brain storming	and disadvantages of mulching.  Describing manure.  Stating the importance of manuring.	Awareness  Fluency  Concern		Int. sci. syllabus bk 4	
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				2. Manure improves on the expected crop yields.								
<b>6</b>	<b>7</b>	<b>Crop growing</b>	<b>CROP HARVESTING</b>	<p><b>CROP HARVESTING</b></p> <ul style="list-style-type: none"> <li>□ Harvesting is the collection of mature crops from the garden</li> </ul> <p><b>Methods of crop harvesting</b></p> <ul style="list-style-type: none"> <li>□ By uprooting using hands e.g. soya beans, beans, ground nuts</li> </ul> <p><b>Storage</b></p> <ul style="list-style-type: none"> <li>□ This is the keeping of surplus food safely after harvesting</li> <li>□ Seeds and cereals after sun drying them, should be stored properly</li> </ul> <p><b>A storage facility (granary)</b></p> <p>rat guards prevent rats from entering</p>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Defines harvesting.</li> <li>2. Mentions garden tools for harvesting different crops.</li> <li>3. Identifies ways /methods of harvesting</li> </ol>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to harvesting. 2. Reads, internalize and writes texts and questions related to care for crops.</p>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p> <p>Brain storming</p>	<p>Defining the term harvesting.</p> <p>Mentioning garden tools for harvesting.</p> <p>Identifying ways/ methods of harvesting</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>The school dem. Garden .</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	



				<p>into the granary</p> <p><b>Reasons for storing food</b></p> <p><input type="checkbox"/> To prevent wastage of food</p> <p><input type="checkbox"/> To sell it when there is good market</p> <p><b>Conditions for proper storage of food</b></p> <p><input type="checkbox"/> The seeds or grains should be stored when they are dry</p>								
7	1	Crop growing		<p><b>Record keeping</b></p> <p><input type="checkbox"/> This is a practice where a farmer writes down all the activities done on the farm.</p> <p><input type="checkbox"/> Farm records are written information about various activities carried out on a farm.</p> <p><b>Types of farm records</b></p> <p><input type="checkbox"/> production records</p> <p><input type="checkbox"/> inventory records</p> <p><b>Reasons why crop</b></p>	<p><b>The learner;</b></p> <p>1. Defines record keeping.</p> <p>2. States the common records kept on a crop farmer.</p> <p>3. Gives the importance of keeping records.</p>	<p><b>The learner;</b></p> <p>1. Pronounces, spells, reads writes and demonstrates meaning of words related to record keeping.</p> <p>2. Reads, internalize and writes texts and questions related to record keeping.</p>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p> <p>Brain</p>	<p>Defining the term harvesting.</p> <p>Mentioning garden tools for harvesting.</p> <p>Identifying ways/ methods of harvesting</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>The school dem. Garden .</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	

				<b>farmers keep records</b> <ul style="list-style-type: none"> <li>□ They enable a crop farmer to calculate profits and losses</li> <li>□ They enable a crop farmer to plan for his farm</li> </ul>			storming					
7	2	Crop growing	Crop pests	<b>Crop pests</b> <ul style="list-style-type: none"> <li>□ A crop pest is a living organism which destroys crops.</li> <li>□ They include: animals, birds, and insects.</li> </ul> <b>Dangers of crop pests</b> <ul style="list-style-type: none"> <li>□ They reduce crop yields</li> <li>□ They lower the quality of crop yields</li> </ul> <b>Signs of pest damage on crops</b> <ul style="list-style-type: none"> <li>□ Some leaves are partly eaten up or have holes</li> <li>□ Fruits develop dark spots</li> <li>□ Cut off buds</li> <li>□ Seeds with holes</li> </ul>	<b>The learner;</b> <ol style="list-style-type: none"> <li>1. Defines crop pests.</li> <li>2. States the Dangers of crop pests.</li> <li>3. Mentions signs of crop pests in the garden</li> </ol>	<b>The learner;</b> <ol style="list-style-type: none"> <li>1. Pronounces, spells, reads writes and demonstrates meaning of words related to crop pests.</li> <li>2. Reads, internalize and writes texts and questions related to crop pests.</li> </ol>	Guided discovery  Discussion  Observation  Brain storming	Defining crop pests.  Stating the dangers of crop pests.  Mentioning signs of crop pests in the garden.	Appreciation.  Care  Awareness  Fluency  Concern	The school dem. Garden .  	Mk. Int. sci. pbk 4  Int. sci. syllabus bk 4	

				<input type="checkbox"/> Rotten tubers <input type="checkbox"/> Stunted growth.								
7	3	Crop Growing	Crop pests for different crops.	<b>Pests for different crop pests</b> <b>Legumes</b> <ul style="list-style-type: none"> <li>- bean weevils</li> <li>- Cut worm</li> <li>- Bean fly</li> <li>- thrips</li> <li>- termites</li> </ul> <b>tubers</b> - rats <ul style="list-style-type: none"> <li>- mice</li> <li>- Caterpillars</li> </ul> <b>Cereals</b> <ul style="list-style-type: none"> <li>- locusts</li> <li>- monkeys</li> <li>- maize weevils</li> </ul> <b>How to control crop pests</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> By spraying crops with pesticides</li> <li><input type="checkbox"/> By putting scare crows in the garden.</li> </ul> <b>Crop diseases</b> <ul style="list-style-type: none"> <li>- Rosette</li> <li>- Tomato blight</li> <li>- Maize streak</li> </ul>	<b>The learner;</b> <ol style="list-style-type: none"> <li>1. Identifies crop pests for different crops.</li> <li>2. States the ways of controls crop pests.</li> <li>3. Mentions the different crop diseases.</li> </ol>	<b>The learner;</b> <ol style="list-style-type: none"> <li>1. Pronounces, spells, reads writes and demonstrates meaning of words related to crop pests.</li> <li>2. Reads, internalize and writes texts and questions related to crop pests.</li> </ol>	Guided discovery  Discussion  Observation  Brain storming	Identifying crop pests for different crops.  Stating the ways of controlling crop pests.  Mentions the different crop diseases.	Appreciation.  Care  Awareness  Fluency  Concern	The school dem. Garden .	Mk. Int. sci. pbk 4  Int. sci. syllabus bk 4	
7	4	Weather change	Types of weather	<b>Weather, What is weather?</b> Weather is the state	<b>The learner;</b> <ol style="list-style-type: none"> <li>1. Give the meaning of</li> </ol>	<b>The learner;</b> <ol style="list-style-type: none"> <li>1. Pronounces, spells, reads</li> </ol>	Guided discovery	Giving the meaning of weather	Appreciation.	The school dem.	Mk. Int. sci.	

		<b>es around us</b>	<b>er</b>	<p>of the atmosphere at a given time and place.</p> <p><b>Types of weather.</b></p> <p><b>Elements / factors of weather.</b></p> <ul style="list-style-type: none"> <li>- Sunshine</li> <li>- Rainfall</li> <li>- Cloud Cover</li> <li>- Wind</li> <li>- Humidity</li> <li>- Temperature</li> </ul> <p><b>Rainfall</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Rainfall is water falling in separate drops from clouds.</li> <li><input type="checkbox"/> Rainfall is the amount of rain water that falls in a certain area at a certain time.</li> </ul>	<p>weather.</p> <p>2. Identifies the types of weather.</p> <p>3. states the weather elements</p>	<p>writes and demonstrates meaning of words related to weather</p> <p>2. Reads, internalize and writes texts and questions related to weather</p>	<p>Discussion</p> <p>Observation</p> <p>Brain storming</p>	<p>Identifying the types of weather.</p> <p>Stating the elements of weather.</p>	<p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>Garden .</p>	<p>pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
7	5	<b>Weath er chang es around us</b>	<b>The water cycle</b>	<p><b>WATER CYCLE (rain cycle)</b></p> <p><b>How rain is formed.</b></p> <ul style="list-style-type: none"> <li>- The sun heats water in water bodies and plants to produce water vapour.</li> <li>- Water vapour rises into the atmosphere.</li> </ul>	<p><b>The learner;</b></p> <p>1. Describes the water cycle.</p> <p>2. Differentiates between rain and rainfall.</p> <p>3. Draws the structure of the water cycle.</p>	<p><b>The learner;</b></p> <p>1. Pronounces, spells, reads writes and demonstrates meaning of words related to weather</p> <p>2. Reads, internalize and</p>	<p>Guided discovery</p> <p>Discussion</p>	<p>Describing the water cycle.</p> <p>Differentiating between a rain and rain fall.</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p>	<p>The school dem. Garden .</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllab</p>	

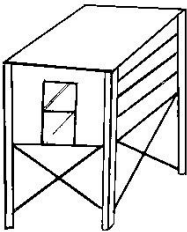
				- Water vapour condenses to form clouds. - When the clouds become heavy, they form rain. <b>An illustration of a water cycle.</b>  <b>Process</b> A – Transpiration B – Evaporation C – Condensation		writes texts and questions related to weather	Observati on  Brain storming	Drawing the structure of the water cycle.	Fluency  Concern		us bk 4	
<b>7</b>	<b>6</b>	<b>Weath er chang es aroun d us</b>	<b>The water cycle</b>	<b>An experiment to show water cycle.</b>  <b>Things needed</b> - A kettle of water - Burning charcoal - Iced bottle	<b>The learner;</b> 1. Describes an experiment to show the water cycle. 2. Identifies the processes involved in the experiment.	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to water cycle 2. Reads, internalize and writes texts and questions related to water cycle.	Guided discovery  Discussion  Observati on  Brain storming	Describing an experiment on the water cycle.  Identifying the process involved in the water cycle.	Appreciation.  Care  Awareness  Fluency  Concern	A chart showin g an illustrati on of the water cycle.	Mk. Int. sci. pbk 4  Int. sci. syllab us bk 4	
<b>7</b>	<b>7</b>	<b>Weath er</b>	<b>How to measu</b>	<b>How to measure rainfall.</b>	<b>The learners;</b> 1. Describes the	<b>The learner;</b> 1. Pronounces,	Guided discovery	Describing the way	Appreciation.	A chart showin	Mk. Int.	

		<b>changes around us.</b>	<b>re rainfall</b>	<p>- Rainfall is measured by an instrument called a rain gauge. - Rainfall is measured in millimetres.</p> <p><b>A DIAGRAM OF A RAIN GAUGE</b></p> <p><b>Importance of rainfall.</b></p> <ul style="list-style-type: none"> <li>- Rainfall cools the temperature.</li> <li>- It provides water for seeds.</li> </ul> <p><b>Dangers of too much rainfall.</b></p> <ul style="list-style-type: none"> <li>- Heavy rainfall causes floods that can destroy the environment.</li> <li>- Floods carry rubbish and soil into lakes and rivers.</li> </ul>	<p>way in which rainfall is measured.</p> <ol style="list-style-type: none"> <li>2. Draws the structure of the rain gauge.</li> <li>3. Gives the importance of rain to people.</li> <li>4. States the danger of rainfall.</li> </ol>	<p>spells, reads writes and demonstrates meaning of words related to water cycle</p> <ol style="list-style-type: none"> <li>2. Reads, internalize and writes texts and questions related to water cycle.</li> </ol>	<p>Discussion</p> <p>Observation</p> <p>Brain storming</p>	<p>rainfall is formed.</p> <p>Drawing the diagram of the rain gauge.</p> <p>Giving the importance of rain.</p> <p>Stating the dangers of rainfall.</p>	<p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>g an illustration of the water cycle.</p>	<p>sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
<b>8</b>	<b>1</b>	<b>Weather changes around us</b>	<b>Clouds</b>	<p><b>Clouds</b></p> <ul style="list-style-type: none"> <li>- Clouds are a mass of condensed water vapour.</li> </ul> <p><b>Types of clouds</b></p> <p><b>Cirrus</b> - furthest in the sky. <b>Cumulus</b></p>	<p><b>The learners;</b></p> <ol style="list-style-type: none"> <li>1. Gives the meaning of clouds.</li> <li>2. Identifies the types of clouds.</li> <li>3. Gives the</li> </ol>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Pronounces, spells, reads writes and demonstrates meaning of words related to weather chart</li> </ol>	<p>Guided discovery</p> <p>Discussion</p>	<p>Giving the meaning of clouds.</p> <p>Identifying the types of clouds.</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p>	<p>A chart showing an illustration of the water cycle.</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int.</p>	

				<p><b>Stratus</b>  <b>Nimbus</b> - lowest clouds  <b>Importance of clouds.</b>  - They give us rain.  - They modify weather (regulate temperature)  <b>Temperature:</b> - Temperature is the degree of hotness or coldness of a body or a place.  - The instrument used to measure temperature is called a thermometer. - <b>Types of thermometers.</b>  - Clinical thermometer  - six's thermometer  - wall thermometer</p>	<p>importance of clouds.  4. Defines temperature.  5. Describes the types of thermometers.</p>	<p>2. Reads, internalize and writes texts and questions related to weather chart</p>	<p>Observation</p> <p>Brain storming</p>	<p>Giving the importance of clouds.</p> <p>Defining temperature.</p> <p>Describing the types of thermometers.</p>	<p>Fluency</p> <p>Concern</p>		<p>sci. syllabus bk 4</p>	
8	2	Weather changes around us	Wind	<p><b>Wind</b>  <input type="checkbox"/> Wind is moving air  <b>Wind instruments: a).</b>  <b>Wind vane</b>  <input type="checkbox"/> It shows the direction where wind is blowing from.  <b>b). Wind sock</b></p>	<p><b>The learner.</b>  1. Describes wind.  2. State the role of a wind vane.  3. Draws the structure of a wind vane, wind sock, and anemometer.</p>	<p><b>The learner;</b>  1. Pronounces, spells, reads writes and demonstrates meaning of words related to wind  2. Reads,</p>	<p>Guided discovery</p> <p>Discussion</p>	<p>Giving the meaning of wind</p> <p>Stating the instrument use in windy weather.</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p>	<p>An illustration of a wind vane, wind sock and anemometer</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci.</p>	

				<input type="checkbox"/> A wind sock and weather cock can show the direction of wind. <b>c). Anemometer</b> <input type="checkbox"/> It is used to measure the speed of wind. <input type="checkbox"/> it has cups which trap wind and rotate as wind blows. <b>Uses of wind:</b> <input type="checkbox"/> Wind is used for winnowing: <input type="checkbox"/> Wind brings cold air in warm places <b>Disadvantages of wind:</b> <input type="checkbox"/> Strong wind leads to soil erosion. <input type="checkbox"/> Strong wind destroys property.	4. States the advantages and disadvantages of wind.	internalize and writes texts and questions related to wind	Observation  Brain storming	Drawing the structure of a wind vane, wind sock and anemometer  Stating the advantage and disadvantages of wind.	Fluency  Concern	meter.	syllabus bk 4	
8	3			<u><b>WEATHER STATION</b></u> <input type="checkbox"/> What is a weather station? <input type="checkbox"/> A weather station is a place where weather conditions are studied.	<b>The learner;</b> 1. Defines a weather station and weather forecast. 2. Draws a Stevenson screen	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to a weather	Guided discovery  Discussion	Giving the meaning of a weather station and weather forecast.	Appreciation.  Care  Awareness	An illustration of a Stevenson screen	Mk. Int. sci. pbk 4  Int.	



			<p><b>Weather forecast:</b></p> <p>□ This is the prediction of future weather changes.</p> <p><b><u>The structure of a</u></b></p> <div data-bbox="488 331 674 563"></div> <p><b><u>Stevenson screen</u></b></p> <p>❖ <b>NB:</b> The Stevenson screen is painted white so as to reflect heat.</p> <p>❖ It is used to keep delicate weather instruments like:</p> <ol style="list-style-type: none"><li>1. Thermometers</li><li>2. Barometers</li><li>3. Hygrometers</li></ol>	<p>3. Identifies the weather instrument kept in a Stevenson screen.</p>	<p>station</p> <p>2. Reads, internalize and writes texts and questions related to weather forecast.</p>	<p>Observation</p> <p>Brain storming</p>	<p>Drawing the structure of a Stevenson screen</p> <p>Identifying the instruments kept in a Stevenson screen.</p>	<p>Fluency</p> <p>Concern</p>		<p>sci. syllabus bk 4</p>	
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8	4	<b>PERSO NAL HYGIE NE</b>	<b>PERSO NAL HYGIE NE</b>	<b>PERSONAL HYGIENE</b> <input type="checkbox"/> Personal hygiene is the general cleanliness of the body. <input type="checkbox"/> Or personal hygiene is the keeping of the	<b>The learner;</b> 1. Defines personal hygiene. 2. States ways of keeping the body clean. 3. Identifies the	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to Personal	Guided discovery  Discussion	Defining personal hygiene.  Stating ways of keeping the body	Appreciation. Care  Awareness	Clean water  A tooth brush	Mk. Int. sci. pbk 4  Int.	
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				body clean. <input type="checkbox"/> <b>Ways of keeping the body clean</b> 1. Bathing daily. 2. Cutting finger nails short. 3. Washing hands after using a latrine/ toilet. 4. Washing clothes. 5. Combing hair. 6. Ironing clothes. <b>Items used in keeping our bodies clean</b> 1. Clean water 2. Tooth paste tooth brush 3. Bathing sponge 4. Towel 5. dental floss	items used to keep the body clean.	hygiene 2. Reads, internalize and writes texts and questions related to Personal hygiene	Observati on  Brain storming	clean.  Identifying the items used to keep the body clean.	Fluency  Concern	Tooth paste	sci. syllab us bk 4	
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8	5	Personal hygiene	Importance of keeping the body clean	<b>Importance of keeping the body clean</b> <input type="checkbox"/> It helps to prevent skin diseases. <input type="checkbox"/> It helps to prevent bad smell caused by sweating. <b>Effects of poor personal hygiene</b> <input type="checkbox"/> It leads to bad body smell.	<b>The learner;</b> 1. States the importance of keeping our bodies clean. 2. States the dangers of poor personal hygiene.	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to Personal hygiene 2. Reads, internalize and writes texts and	Guided discovery  Discussion  Observati	Stating the importance of keeping our bodies clean.  Stating the dangers of poor personal	Appreciation. Care  Awareness  Fluency	Clean water  A tooth brush  Tooth paste	Mk. Int. sci. pbk 4  Int. sci. syllabus bk 4	
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				<input type="checkbox"/> It leads to skin diseases. <b>Keeping clothing and beddings clean</b> <input type="checkbox"/> Beddings should be washed regularly with clean water and soap. <input type="checkbox"/> Clothes need to be ironed after washing in order to kill parasites and germs. <b>Diagram of a child ironing</b> <input type="checkbox"/> <b>Importance of keeping beddings clean.</b> <input type="checkbox"/> It prevents bad smell. <input type="checkbox"/> It prevents parasites like lice, ticks and fleas.	questions related to Personal hygiene	on   Brain storming	hygiene	Concern				
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## PRIMARY FOUR SCIENCE SCHEME OF WORK FOR TERM III, 2023

W K	P D	TOPIC	TOPIC	CONTENT	SUBJ. COMP'NCES	LANG. COMP'NCES	METHODS	ACTIVITIES	IND. OF L.S.V	INST. MAT.	REF.	R E M
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1	1	<b>communicable intestinal diseases and worm infestations</b>	<b>Communicable Diseases</b>	<p><b><u>COMMUNICABLE DISEASES;</u></b> These are diseases which can be spread from one person to another.</p> <p><b><u>Diarrheal diseases</u></b> These are diseases that affect the gut, and they are characterized by diarrhea Examples include; 1. Typhoid 2. Dysentery 3. Peptic ulcers</p>	<p><b>The learner;</b> -Defines the term communicable diseases -Names different communicable diseases -States different causes of intestinal communicable diseases</p>	<p><b>The learner;</b> -Pronounces, spells, reads, writes and demonstrates, words related to intestinal communicable diseases</p>	<p>-Class discussion -Guided discovery - Brain storming</p>	Naming examples of diarrhea diseases	Awareness, Care, appreciation	work cards showing examples of diarrheal diseases	Mk integrated science	1
2	2	<b>communicable intestinal diseases and worm infestations</b>	<b>How intestinal diseases are spread</b>	<p><b><u>How intestinal diseases are spread.</u></b> 1. Through eating contaminated food. 2. Through drinking contaminated water. 3. Through a 4 F path germ</p>	<p><b>The learner;</b> describes the 4Fs path germ</p>	<p><b>The learner;</b> Pronounces, spells, reads, and writes and demonstrated the meaning of words related to 4Fs path germ</p>	<p>-Brain storming, -Guided discovery</p>	Describing the 4Fs path germ.	<p>Fluency  Observation care  awareness</p>	A chart showing 4Fs path germ.	Comprehensive science book 4.	

		<b>Communicable intestinal diseases and worm infestations</b>	<b>DIARRHOEA</b>	<b><u>DIARRHOEA</u></b> - This is a disease caused by either a virus or bacteria or amoeba. - Diarrhea involves passing out of watery stools frequently. <b><u>Effects of diarrhea</u></b> -Diarrhea causes dehydration	<b>The learner;</b> defines diarrhea. -states the ways through which diarrhea is spread.	<b>The learner;</b> Pronounces, spells, reads, and writes and demonstrated the meaning of words related to diarrhea	Class discussion -Guided discovery - Brain Storming.	Identifying the ways through which diarrhea is spread.	Fluency, appreciation, care.	Work cards showing the spread of diarrhea	Mk integrated science pupils book 4	2
2	4	<b>Communicable intestinal diseases and worm infestations</b>	<b>CHOLERA AND TYPHOID</b>	<b><u>DYSENTERY</u></b> -This is diarrhea with blood or mucus. -It is caused by either bacteria or amoeba. signs and symptoms of dysentery -pain in the abdomen -bloody diarrhea -vomiting <b>CHOLERA</b> It is caused by bacteria <b>Signs and symptoms of Cholera</b> -watery stool -frequent vomiting -dehydration	<b>The learner;</b> - States the cause of cholera and typhoid -Gives signs and symptoms of cholera and typhoid.	<b>The learner;</b> Pronounces, spells, reads, and demonstrated the meaning of the words related to cholera and typhoid.	Class discussion Guided discovery -Brain Storming	Identifying the ways through which typhoid and cholera are spread	Fluency, appreciation, care.	Work cards showing the spread of cholera and typhoid	Mk integrated science pupils book 4	2
1	5	<b>Communicable</b>	<b>Prevention, control</b>	<b>Prevention, control and of</b>	<b>The learner;</b> - States the cause of typhoid	<b>The learner;</b> Pronounces, spells, reads, and	Class discussion Guided	Stating	Fluency, appreciation, care.	Work cards showing	Mk integrated	

				<b>diarrhoeal diseases.</b>								
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		<b>intestinal diseases and worm infestations</b>	<b>and treatment of diarrhoeal diseases.</b>	<p>It is caused by bacteria</p> <p><b>Signs and symptoms of Typhoid</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Abdominal pain</li> <li><input type="checkbox"/> Fever</li> <li><input type="checkbox"/> headaches</li> </ul> <p><b>Effects of typhoid</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> diarrhea</li> <li><input type="checkbox"/> dehydration</li> <li><input type="checkbox"/> death</li> </ul> <p><b>The 3 Ds</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Diarrhea</li> <li><input type="checkbox"/> Dehydration</li> <li><input type="checkbox"/> Death</li> </ul>	-Gives signs and symptoms of typhoid.	demonstrated the meaning of the words related to typhoid.	discovery -Brain Storming			g the spread of cholera and typhoid	ed science pupils book 4	
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1	6	<b>Communicable intestinal diseases and worm infestations</b>	<b>Prevention, control and treatment of diarrhoeal diseases.</b>	<p>□ Washing hands with soap and clean water.</p> <p>□ Cleaning of toilets</p> <p><b>Effect of diarrhoeal diseases:</b></p> <p><b>They can lead to; Dehydration</b></p> <p>□ Dehydration is the condition when the body does not have enough water.</p> <p><b>Causes of dehydration</b></p>	<p><b>The learner,</b></p> <p>1. States the ways of preventing the spread of diarrhoeal diseases.</p> <p>2. States the effect of diarrhoeal diseases</p> <p>3. States the causes of dehydration.</p> <p>4. Mentions signs and symptoms of dehydration.</p>	<p>The learner;</p> <p>1. Pronounces, spells, reads writes and demonstrates meaning of words related to prevention and control of Diarrhoeal diseases</p> <p>2. Reads, internalize and writes texts and questions related to prevention and control of</p>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation illustration</p>	<p>Stating the ways of preventing the spread of diarrhoeal diseases.</p> <p>Stating the effect of diarrhoeal</p> <p>Stating the causes of dehydration .</p> <p>Mentioning</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>A picture of a dehydrated child.</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
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				<p>□ Too much diarrhoea</p> <p>□ Too much vomiting</p> <p><b>Signs and symptoms of dehydration.</b></p> <p>□ Sunken eyes.</p> <p>□ Little or no urine or tears.</p>		Diarrhoeal diseases		signs and symptoms of dehydration . plant.				
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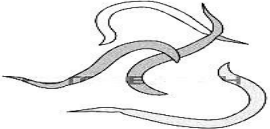


2	1	<b>Communicable intestinal diseases and worm infestations</b>	<b>Treatment of dehydration.</b>	<p><input type="checkbox"/> The patient should be given Oral Rehydration solution (ORS)</p> <p><input type="checkbox"/> ORS is given in order to replace the lost body fluids.</p> <p><b>Preparation of ORS / SSS – Salt sugar solution ORS – from a sachet.</b></p> <p><b>What is needed?</b></p> <ol style="list-style-type: none"> <li>1. One sachet of ORS (oral rehydration salts)</li> <li>2. 1 litre (2 tumpecos) of drinking water.</li> <li>3. Spoon</li> <li>4. Water</li> <li>5. Clean container</li> </ol>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Mentions the treatment given to a dehydrated person.</li> <li>2. Illustrate how to prepare ORS/ SSS</li> </ol>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Pronounces, spells, reads writes and demonstrates meaning of words related to treatment of dehydration</li> <li>2. Reads, internalize and writes texts and questions related to treatment of dehydration.</li> </ol>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation illustration</p>	<p>Mentioning the treatment given to a dehydrated person.</p> <p>Illustrating how to prepare ORS/ SSS</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>Salt</p> <p>Sugar</p> <p>Water</p> <p>water jar</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
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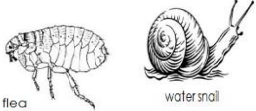
				<p><b>Steps taken to prepare</b></p> <p><input type="checkbox"/> Wash your hands with water and soap.</p>								
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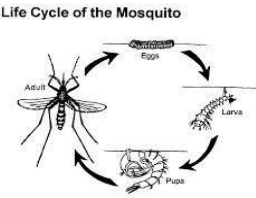
2	2	Comm unicab le intestin al diseas es and worm infesta tions	Prepar ation of S.S.S – Salt Sugar solutio n Requir ement s	Preparation of S.S.S – <b>Salt Sugar solution Requirements</b> <input type="checkbox"/> water and soap <input type="checkbox"/> clean boiled cool water <b>Steps taken</b> <input type="checkbox"/> Wash your hands with water and soap. <input type="checkbox"/> Measure one litre of clean cool boiled water and pour it in in a clean container. <input type="checkbox"/> Measure 8 levelled tea spoons of sugar and one leveled tea spoon of salt into the container	<b>The learner;</b> 1. Identifies the steps involved in preparing ORS/SSS. 2. Practically prepares ORS/ <b>s.s.s</b>	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to preparation of ORS/SSS 2. Reads, internalize and writes texts and questions related to preparation of ORS/ SSS	Guided discovery  Discussion  Observati on  Illustration  Demonstr ation.	Identifying the steps involved in preparing ORS/SSS.  Practically preparing <b>ORS/ s.s.s</b>	Appreciation.  Care  Awareness  Fluency  Concern	Salt  Sugar  Water  water jar	Mk. Int. sci. pbk 4    Int. sci. sylla bus bk 4
2	3	Comm unicab le intestin al diseas es and	<b>WORM INFESTATION</b>	<b>WORM INFESTATION</b> <input type="checkbox"/> Worms are long, slender soft bodied animals with no limbs. <input type="checkbox"/> Worms can live in soil, bodies of	<b>The learner;</b> 1. Describes worm infestations. 2. Mentions the examples of worms.	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to	Guided discovery  Discussion  Observati	describing worm infestations  Mentioning the examples of	Appreciation.  Care	A chart showin g differen t types of worms.	Mk. Int. sci. pbk 4

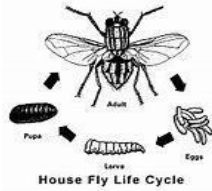
		<b>worm infestations</b>		<p>animals, in fresh water, in plants, fruits or vegetables. <b>Examples of intestinal worms</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> tape worms</li> <li><input type="checkbox"/> hook worms</li> </ul> <p><b>How we can get worms.</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Eating contaminated food with worms or eggs</li> <li><input type="checkbox"/> Drinking contaminated water-Eating under cooked meat (pork/ beef)</li> </ul>	3. States how worms get into our bodies.	<p>worm infestations.</p> <p>2. Reads, internalize and writes texts and questions related to worm infestations.</p>	<p>on</p> <p>Illustration</p> <p>Demonstration.</p>	<p>worms.</p> <p>Stating how worms gets into our bodies.</p>	<p>Awareness</p> <p>Fluency</p> <p>Concern</p>		Int. sci. syllabus bk 4	
2	4	<b>Communicable intestinal diseases and worm infestations</b>	<b>Signs and symptoms of worm infestation</b>	<p><b>Signs and symptoms of worm infestation</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> diarrhoea</li> <li><input type="checkbox"/> loss of weight</li> </ul> <p><b>TAPE WORMS</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> They are flat</li> <li><input type="checkbox"/> They have segments (segmented)</li> </ul> <p><b>Structure of a tape worm.</b></p> <p><b>Note:</b></p>	<p><b>The learner;</b></p> <p>1. Describes signs and symptoms of tape worm infestation</p> <p>2. Describes the structure of a tape worms</p> <p>3. States how tape worms get into our bodies.</p>	<p><b>The learner;</b></p> <p>1. Pronounces, spells, reads writes and demonstrates meaning of words related to tape worm infestations.</p> <p>2. Reads, internalize and writes texts and questions</p>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p> <p>Illustration</p>	<p>Describing the signs and symptoms of tape worm infestations</p> <p>Stating how tapes worms get into our bodies.</p> <p>Stating how</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p>	<p>A chart showing a structure of a tape worm.</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus</p>	

				<input type="checkbox"/> The head of a tape worm is called a Scolex <input type="checkbox"/> The hooks and suckers help tapeworms to hold on to the intestines <b>Prevention of tape worms.</b> <input type="checkbox"/> Keeping toilets and latrines clean <input type="checkbox"/> Proper disposal of faeces in latrines <b>Treatment of tape worms.</b> <input type="checkbox"/> Deworming all family members and animals at home regularly.	4. States the ways of preventing and treating tape worm infestations.	related to tape worm infestations.	Demonstration.	ways of controlling the spread of tape worm infestations	Fluency  Concern		bus bk 4	
2	5	Communicable intestinal diseases and worm infestations	HOOK WORMS	<b>HOOK WORMS</b> <input type="checkbox"/> They feed on blood <input type="checkbox"/> They live in small intestines <b>Structure of a hook worm.</b>  <b>Signs and symptoms of hookworms</b>	<b>The learner;</b> 1. Describes the structure of a hook worm. 2. Describes signs and symptoms of a hook worm infestation. 3. States how tapeworms get into our bodies.	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to hook worm infestations. 2. Reads, internalize and writes texts and questions	Guided discovery Discussion Observation Illustration	Describing the signs and symptoms of hook worm infestations Stating how hook worms get into our bodies. Stating how	Appreciation. Care Awareness	A chart showing a structure of a hook worm.	Mk. Int. sci. pbk 4  Int. sci. syllab	



				<input type="checkbox"/> Swollen belly. <input type="checkbox"/> Itching anus <b>Prevention and treatment of thread worm infestation</b> <input type="checkbox"/> Wash your hands before handling any food and after using the toilet. <input type="checkbox"/> Practice proper personal and food hygiene	worm infestations.		ation.	of pin worm infestations.	Concern			
<b>3</b>	<b>1</b>	<b>Vector s and diseas es</b>	<b>Comm on vector s.</b>	<b>Common vectors.</b> A vector is an organism that spreads germs. <b>Examples of common vectors</b>  <b>Characteristics of vectors</b> <input type="checkbox"/> Some vectors have a proboscis for sucking blood e.g. mosquitoes, ticks, fleas, lice and tsetse flies. <input type="checkbox"/> Some have a hairy body for carrying germs	<b>The learner;</b> 1. Describes a vector. 2. States examples of vectors.	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to vectors. 2. Reads, internalize and writes texts and questions related to vectors	Guided discovery Discussion Observati on Illustration Demonstr ation.	Describing vector. Stating examples of vectors.	Appreciation. Care Awareness Fluency Concern	A chart showin g commo n vectors in the environ ment	Mk. Int. sci. pbk 4 Int. sci. syllabus bk 4	

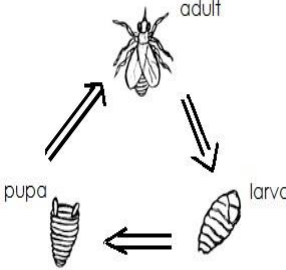
				e.g. a house fly								
3	2	Vector s and diseas es	How vector s spread diseas es. Mosqui toes	<p><b>How vectors spread diseases.</b> <b>Mosquitoes</b> Mosquitoes lay their eggs in stagnant water (still water)</p> <p><b>Life cycle of a mosquito</b></p>  <p><b>How mosquitoes spread germs;</b> <input type="checkbox"/> Germs are spread by an adult mosquito through <u>bites</u>.</p> <p><b>Diseases spread by different mosquitoes.</b> <input type="checkbox"/> Female anopheles mosquito – malaria <input type="checkbox"/> Tiger / Aedes mosquito – yellow fever</p>	<p><b>The learner;</b> 1. States how mosquitoes spread diseases. 2. Describes the life cycle of a mosquito 3. States how mosquitoes spread diseases. 4. Mentions the diseases spread by mosquitoes.</p>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to how mosquitoes spread diseases 2. Reads, internalize and writes texts and questions related to how mosquitoes spread diseases.</p>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p> <p>Illustration</p> <p>Demonstration.</p>	<p>Stating how mosquitoes spread diseases.</p> <p>Describing the life cycle of a mosquito</p> <p>Stating how mosquitoes spreads diseases</p> <p>Mentioning the diseases spread by mosquitoes</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>A chart showing a life cycle of a mosquito.</p> <p>Int. sci. syllabus bk 4</p>	<p>Mk. Int. sci. pbk 4</p>	
3	3	Vector	House	House flies	The learner;	The learner;	Guided	Stating how	Appreciati-	A chart	Mk.	

		<b>s and diseases</b>	<b>flies</b>	<p>□ Houseflies live in dirty places e.g. latrines and rubbish pits.</p> <p><b>Lifecycle of a housefly</b></p>  <p>The diagram illustrates the life cycle of a housefly. It starts with 'Eggs' (small circles), which develop into 'Larva' (a segmented worm-like creature), then into a 'Pupa' (a more complex segmented form), and finally into an 'Adult' housefly. Arrows indicate the progression from one stage to the next in a clockwise cycle.</p> <p>□ Houseflies lay eggs in decaying matter for their larvae to feed on decayed matter.</p> <p><b>How houseflies spread germs.</b></p> <p>□ Germs are spread by an adult housefly using its hairy body when it visits dirty places.</p> <p>□ The germs are carried onto our uncovered food.</p> <p><b>Diseases spread by houseflies</b> diarrhoea typhoid</p>	<p>1. States how house flies spread diseases.</p> <p>2. describes the life cycle of a house fly</p> <p>3. States how house flies. Spread diseases.</p> <p>3. Mentions the diseases spread by a housefly</p>	<p>1. Pronounces, spells, reads writes and demonstrates meaning of words related to how houseflies spread diseases</p> <p>2. Reads, internalize and writes texts and questions related to how houseflies spread diseases.</p>	<p>discovery</p> <p>Discussion</p> <p>Observation</p> <p>Illustration</p> <p>Demonstration.</p>	<p>houseflies spread diseases.</p> <p>Describing the life cycle of a housefly</p> <p>Stating how a house fly Spreads diseases.</p> <p>Mentioning the diseases spread by houseflies.</p>	<p>on.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>showin g a life cycle of a housefl y</p> <p>Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
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				dysentery cholera								
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3	4	Vector s and diseas es	Cockr oache s	<p><b>Cockroaches</b></p> <ul style="list-style-type: none"> <li>- Cockroaches are commonly found in dark corners and dark places e.g. cupboards, wall cracks and latrines.</li> </ul> <p><b>Lifecycle of a cockroach.</b></p> <p><b>How cockroaches spread germs.</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Cockroaches pick germs from dirty places which they carry on their hairy body.</li> <li><input type="checkbox"/> When they land on uncovered food, they leave germs on it and we get them when we eat that food.</li> </ul> <p><b>Diseases spread by cockroaches.</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Diarrhoea</li> <li><input type="checkbox"/> Cholera</li> <li><input type="checkbox"/> Dysentery</li> <li><input type="checkbox"/> Typhoid</li> </ul>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. States how cockroaches spread diseases.</li> <li>2. describes the life cycle of a cockroach</li> <li>3. States how cockroaches spread diseases.</li> <li>4. Mentions the diseases spread by a cockroach</li> </ol>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Pronounces, spells, reads writes and demonstrates meaning of words related to how cockroaches spread diseases</li> <li>2. Reads, internalize and writes texts and questions related to how cockroach spread diseases.</li> </ol>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p> <p>Illustration</p> <p>Demonstration.</p>	<p>Stating how cockroache s spread diseases.</p> <p>Describing the life cycle of a cockroach</p> <p>Stating how house fly spread diseases.</p> <p>Mentioning the diseases spread by cockroache s</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>A chart showin g a life cycle of a cockro ach</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. sylla bus bk 4</p>	
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3	5	Vector s and diseas es	Lifecyc le of a tsetse fly	<b>Lifecycle of a tsetse fly</b>  An adult housefly doesn't lay eggs, the eggs hatch inside the body and passes out the larvae. <b>How a tsetse fly spreads diseases</b> <input type="checkbox"/> By biting <b>Disease spread by tsetse flies</b> <input type="checkbox"/> Sleeping sickness (to people) <input type="checkbox"/> Nagana (to animals) <b>Other diseases vectors</b> rat fleas lice	<b>The learner;</b> 1. States how tsetse flies spread diseases. 2. describes the life cycle of a tsetse flies 3. States how a tsetse fly spreads diseases. 4. Mentions the diseases spread by tsetse flies	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to how tsetse flies 2. Reads, internalize and writes texts and questions related to tsetse flies	Guided discovery Discussion Observati on Illustration Demonstr ation.	Stating how cockroache s spread diseases. Describing the life cycle of a cockroach Stating how tsetse fly spreads diseases. Mentioning the diseases spread by tsetse flies	Appreciation. Care Awareness Fluency Concern	A chart showin g a life cycle of a tsetse flies.	Mk. Int. sci. pbk 4  Int. sci. sylla bus bk 4
3	6	Vector s and diseas es	Preven tion and control	<b>Prevention and control of disease vectors and diseases. Ways of controlling</b>	<b>The learner;</b> 1. States ways of controlling the spread of	<b>The learner;</b> 1. Pronounces, spells, reads writes and	Guided discovery Discussion	Stating ways of controlling the spread	Appreciation. Care	The environ ment	Mk. Int. sci. pbk

			<b>of diseases vector s and diseases es. Ways of controlling mosqu itoes / malari a</b>	<b>mosquitoes / malaria</b> <input type="checkbox"/> Draining stagnant water <input type="checkbox"/> Cleaning bushes near our homes. <input type="checkbox"/> Spraying using insecticides. <b>Ways of controlling diseases spread by houseflies / cockroaches.</b> <input type="checkbox"/> Covering leftover food. <input type="checkbox"/> Proper disposal of faeces. <input type="checkbox"/> Collecting and burning rubbish. <b>Controlling tsetse flies.</b> <input type="checkbox"/> Using traps to trap adult tsetse flies. <input type="checkbox"/> Cleaning bushes near our homes. <input type="checkbox"/> Spraying using insecticides. <b>Control of fleas, ticks and mites</b> <input type="checkbox"/> Spraying using insecticides. <input type="checkbox"/> Washing and ironing beddings	vectors and diseases.  2. States ways of controlling the spread of tsetse flies, houseflies, cockroaches and mosquitoes.	demonstrates meaning of words related to ways of controlling the spread of diseases and vectors.  2. Reads, internalize and writes texts and questions related to ways of controlling the spread of diseases and vectors.	Observati on  Illustration  Demonstr ation.	of vectors and diseases.  2. Stating ways of controlling the spread of tsetse flies, houseflies, cockroache s and mosquitoes.	Awareness  Fluency  Concern	Chalkb oard illustrati on.	4  Int. sci. sylla bus bk 4	
4	1	Accid ents	accide nts	<b>Accidents</b> <input type="checkbox"/> An accident is a	<b>The learner;</b> 1. Defines an	<b>The learner;</b> 1. Pronounces,	Guided discovery	Defining an accident.	Appreciation.	The environ	Mk. Int.	

		<b>and first aid</b>		<p>sudden happening that may cause harm to the body.</p> <p><input type="checkbox"/> A person involved in an accident is called a casualty.</p> <p><b>Examples of accidents at home</b></p> <p><input type="checkbox"/> Cuts and scalds</p> <p><input type="checkbox"/> Poisoning</p> <p><input type="checkbox"/> Drowning</p> <p><input type="checkbox"/> Electric shocks</p> <p><b>Accidents on the way to school</b></p> <p><input type="checkbox"/> motor accidents</p> <p><input type="checkbox"/> stings</p> <p><input type="checkbox"/> cuts</p> <p><input type="checkbox"/> bites</p>	<p>accident.</p> <p>2. Mentions examples of accidents at home and at school.</p>	<p>spells, reads writes and demonstrates meaning of words related to accidents.</p> <p>2. Reads, internalize and writes texts and questions related to accidents.</p>	<p>Discussion</p> <p>Observation</p> <p>Illustration</p> <p>Demonstration.</p>	<p>Mentioning examples of accidents at home and at school.</p>	<p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>ment</p>	<p>sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
<b>4</b>	<b>2</b>			<p><b>Types of injuries and their causes.</b></p> <p><b>Burns</b></p> <p><input type="checkbox"/> A burn is an injury caused by dry heat.</p> <p><b>Source causes of burns.</b></p> <p><input type="checkbox"/> hot charcoal</p> <p><input type="checkbox"/> hot metals</p> <p><input type="checkbox"/> fire</p>	<p><b>The learner;</b></p> <p>1. Defines a burn and a scald.</p> <p>2. Mentions the sources of burns and scalds.</p> <p>3. Mentions ways of preventing burns and scalds.</p>	<p><b>The learner;</b></p> <p>1. Pronounces, spells, reads writes and demonstrates meaning of words related to burns and scalds.</p> <p>2. Reads, internalize and</p>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p>	<p>Defining a burn and a scald.</p> <p>Mentioning the sources of burns and scalds.</p> <p>Mentioning ways of</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p>	<p>The environment</p> <p>Chalk board illustration.</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int.</p>	

				<input type="checkbox"/> electricity <b>Scalds</b> A scald is an injury on the body caused by wet heat. <b>Sources / causes of scalds</b> 1. hot water 2. steam 3. hot porridge 4. hot soup		writes texts and questions related to burns and scalds.	Illustration  Demonstration.	preventing burns and scalds.	Fluency  Concern		sci. syllabus bk 4	
4	3			<b>Fracture</b> A fracture is a broken or cracked bone in the body. <b>Causes of fractures.</b> <input type="checkbox"/> Falling from a tree, bed, building etc. <input type="checkbox"/> Getting involved in motor accidents <input type="checkbox"/> Playing rough games. <b>Types of fractures.</b> <b>Simple fracture</b> <b>Compound fracture</b>	<b>The learner;</b> 1. Defines a fracture. 2. Mentions the causes of fractures. 3. Describes the types of fractures.	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to fractures. 2. Reads, internalize and writes texts and questions related to fractures.	Guided discovery  Discussion  Observation  Illustration  Demonstration.	Defining a fracture.  Mentioning the causes of fractures.  Describing the types of fractures.	Appreciation.  Care  Awareness  Fluency  Concern	The environment  A chart showing a simple and compound fracture.	Mk. Int. sci. pbk 4  Int. sci. syllabus bk 4	



### **Simple fracture**

- This is when the bone breaks or cracks and it remains inside the skin.

### **Structure of a simple fracture.**

### **Compound fracture.**

- This is where the bone breaks and comes out of the skin. **Structure of a compound fracture.**

<b>4</b>	<b>4</b>			<b>Sprains, strains and dislocations</b> <ul style="list-style-type: none"> <li>□ A sprain is a twisted or torn ligament.</li> <li>□ A ligament is a structure that joins a bone to bone.</li> </ul> <b>Causes of sprains.</b> Twisting or tearing of	<b>The learner;</b> <ol style="list-style-type: none"> <li>Defines a strain a sprain and a dislocation.</li> <li>Mentions the causes strains, sprain and dislocations.</li> </ol> States the first aid	<b>The learner;</b> <ol style="list-style-type: none"> <li>Pronounces, spells, reads writes and demonstrates meaning of words related to sprains, strains and dislocations.</li> </ol>	Guided discovery  Discussion  Observati on	Defining a strain a sprain and a dislocation.  Mentioning the causes strains, sprain and dislocations.	Appreciation.  Care  Awareness	Chalkb oard illustrati on.	Mk. Int. sci. pbk 4

				<p>the ligament</p> <p><b>Signs and sprains</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Swelling around the joint.</li> <li><input type="checkbox"/> Pain in the joint.</li> </ul> <p><b>Stains</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> A strain is an injury on the tendon or muscle.</li> <li><input type="checkbox"/> A tendon is a tissue that joins a muscle to a bone</li> </ul> <p><b>Causes of strains.</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Over stretching of a muscle.</li> </ul> <p><b>Signs of a strain</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Sudden sharp pain in a muscle.</li> <li><input type="checkbox"/> The muscle may appear swollen.</li> </ul> <p><b>Dislocation</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> This is where a bone gets out of its usual position.</li> </ul>	for dislocations.	2. Reads, internalize and writes texts and questions related to sprains, strains and dislocations.	<p>Illustration</p> <p>Demonstration.</p>	<p>Stating the first aid for dislocations.</p>	<p>Fluency</p> <p>Concern</p>		Int. sci. syllabus bk 4	
4	5			<p><b>Ways of preventing accidents How to prevent accidents at home.</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Keep medicine, drugs and other chemicals out of children's reach.</li> <li><input type="checkbox"/> Cooking should</li> </ul>	<p><b>The learner;</b></p> <p>1. States ways of controlling and preventing accidents at and at school.</p>	<p><b>The learner;</b></p> <p>1. Pronounces, spells, reads writes and demonstrates meaning of words related to prevention of accidents.</p>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p>	<p>Sating ways of controlling and preventing accidents at and at school..</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p>	<p>Road traffic signs</p>	Mk. Int. sci. pbk 4	



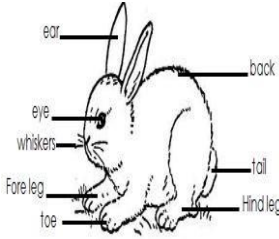
				<p>be done in a raised place where children cannot reach.</p> <p><input type="checkbox"/> Avoid playing with electric equipment</p> <p><b>Preventing accidents on the way to school.</b></p> <p><input type="checkbox"/> Avoid on the road.</p> <p><input type="checkbox"/> Use a zebra crossing when crossing the road.</p>		<p>2. Reads, internalize and writes texts and questions related to prevention of accidents/</p>	<p>Illustration</p> <p>Demonstration.</p>		<p>Fluency</p> <p>Concern</p>		Int. sci. syllabus bk 4	
<b>4</b>	<b>6</b>			<p><b>Safety rules on the road.</b></p> <p><input type="checkbox"/> Look right and then left, look right again before you cross the road.</p> <p><input type="checkbox"/> Use a zebra crossing to cross the road.</p> <p><input type="checkbox"/> Avoid playing on the road.</p> <p><input type="checkbox"/> Always walk on the pedestrian side of the road. <b>Examples of road signs</b></p>	<p><b>The learner;</b></p> <p>1. States the safety rules on the road.</p> <p>2. Identifies examples of road signs.</p>	<p><b>The learner;</b></p> <p>1. Pronounces, spells, reads writes and demonstrates meaning of words related to prevention of accidents.</p> <p>2. Reads, internalize and writes texts and questions related to prevention of accidents/</p>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p> <p>Illustration</p> <p>Demonstration.</p>	<p>Sating the safety rules on the road.</p> <p>Identifying examples of road signs.</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>Road traffic signs</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
<b>5</b>	<b>1</b>			<b>Poisoning</b>	<b>The learner;</b>	<b>The learner;</b>	Guided	Defining	Appreciati-	Jik	Mk.	

				<p>☐ Poison is anything that can cause harm or death when it gets in the body.</p> <p>☐ Poisoning happens when one eats or drinks something that is harmful to the body.</p> <p><b>Causes of poisoning</b></p> <p>☐ Taking expired drugs.</p> <p>☐ Taking over dose of medicine. <b>Signs and symptoms of poisoning.</b></p> <ol style="list-style-type: none"> <li>1. Vomiting</li> <li>2. Fainting</li> <li>3. Difficulty or rapid breathing</li> </ol> <p><b>Prevention of poisoning.</b></p> <ol style="list-style-type: none"> <li>1. Keep drugs away from children's reach.</li> <li>2. Take drugs prescribed by health workers.</li> </ol>	<ol style="list-style-type: none"> <li>1. Defines poison and poisoning.</li> <li>2. Mentions the causes of poisoning</li> <li>3. Identifies the signs and symptoms of poisoning.</li> <li>4. States ways of preventing poisoning.</li> </ol>	<ol style="list-style-type: none"> <li>1. Pronounces, spells, reads writes and demonstrates meaning of words related to poisoning.</li> <li>2. Reads, internalize and writes texts and questions related to poisoning.</li> </ol>	<p>discovery</p> <p>Discussion</p> <p>Observation</p> <p>Illustration</p> <p>Demonstration.</p>	<p>poison and poisoning.</p> <p>Mentioning the causes of poisoning</p> <p>Identifying the signs and symptoms of poisoning.</p> <p>Stating ways of preventing poisoning.</p>	<p>on.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>Vim</p> <p>rat poison</p> <p>Insecticides.</p>	<p>Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
5	2			<p><b>First aid Kit</b></p> <p>A first aid kit is a collection of first aid</p>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Defines a first aid kit.</li> </ol>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Pronounces, spells, reads</li> </ol>	Guided discovery	Defining a first aid kit.	Appreciation.	Jik	Mk. Int. sci.	

				materials <b>Components of a first aid kit and their uses.</b> A razor blade. A safety pin. A pair of scissors A gauze plaster	2. Identifies the components of a first aid kit with their uses in first Aid administration.	writes and demonstrates meaning of words related to first aid kit 2. Reads, internalize and writes texts and questions related to first aid kit	Discussion  Observation  Illustration	Identifying the components of a first aid kit with their uses in first aid administration.	Care  Awareness  Fluency  Concern	Vim rat poison  Insecticides.	pbk 4  Int. sci. syllabus bk 4	
5	3			<b>Giving first aid</b> <input type="checkbox"/> First aid is the immediate help given to a casualty before being taken to the health centre. <b>Reasons for giving first aid</b> <input type="checkbox"/> -save life. <input type="checkbox"/> To reduce pain. <b>First aid for burns and scalds</b> <input type="checkbox"/> Cool the injured part with clean cold water. <b>First aid for fractures.</b> <input type="checkbox"/> Tie splints on the fractured area. <b>A splint on the leg</b>	<b>The learner;</b> 1. Defines a first aid 2. Gives reasons for giving first aid.	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to first aid 2. Reads, internalize and writes texts and questions related to first aid.	Guided discovery  Discussion  Observation  Illustration	Defining a first aid.  Giving reasons for giving first aid.	Appreciation.  Care  Awareness  Fluency  Concern	Chalkboard illustration	Mk. Int. sci. pbk 4  Int. sci. syllabus bk 4	

				solid poison.								
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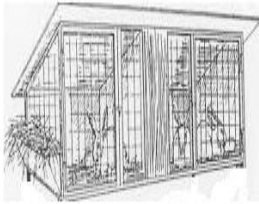
				<p>called a buck - The young of a rabbit is called a kit. - Many young rabbits born at the same time are called a litter.</p> <p><b>The external parts</b></p>  <p><b>of a rabbit.</b></p>	<p>2. Draws and labels the external parts of a rabbit.</p>	<p>demonstrates meaning of words related to rabbits</p> <p>2. Reads, internalize and writes texts and questions related to rabbits</p>	<p>Observation</p> <p>Illustration</p>	<p>nose bleeding</p>	<p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>rabbit.</p>	<p>4</p> <p>Int. sci. syllabus bk 4</p>	
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6	1	Keepin g rabbits	Types of Rabbit s	<b>Types of Rabbits</b> 1. local breeds 2. exotic breeds <b>Local breeds of rabbits.</b> <input type="checkbox"/> They are also called indigenous breeds or native breeds <input type="checkbox"/> They mainly live in bushes (burrows) on their own. <b>Exotic breeds of rabbits.</b> <input type="checkbox"/> They are kept in homes (hutches) <input type="checkbox"/> They live in	<b>The learner;</b> 1. Identifies the types of rabbits. 2. Describe the <b>CCCs</b> of local and exotic breeds of rabbits.	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to rabbits 2. Reads, internalize and writes texts and questions related to rabbits	Guided discovery  Discussion  Observati on  Illustration	. Identifies the types of rabbits. 2. Describe the <b>CCCs</b> of local and exotic breeds of rabbits.	Appreciation.  Care  Awareness  Fluency  Concern	Chart showin g differen t breeds exotic breeds.	Mk. Int. sci. pbk 4   Int. sci. sylla bus bk 4	
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				hutches constructed by the farmers. <b>Examples of exotic breeds of rabbits.</b> 1. Angora rabbits 2. Rex rabbit 3. Californian rabbits								
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6	2	Keepin g rabbits	Uses of rabbits	<b>Uses of rabbits</b> <b>Reasons why people keep rabbits</b> <ul style="list-style-type: none"> <li>□ Rabbits are sold by farmers to get money.</li> <li>□ Rabbits are a source of meat</li> <li>□ Rabbits provide skins used to make bags, jackets, belts, shoes and host.</li> </ul> <b>Comparing the local and exotic breeds</b>	<b>The learner;</b> <ol style="list-style-type: none"> <li>1. States the uses of rabbits to people.</li> <li>2. Compares local breeds of rabbits and exotic breeds.</li> </ol>	<b>The learner;</b> <ol style="list-style-type: none"> <li>1. Pronounces, spells, reads writes and demonstrates meaning of words related to rabbits</li> <li>2. Reads, internalize and writes texts and questions related to rabbits</li> </ol>	Guided discovery  Discussion  Observati on  Illustration	Stating the uses of rabbits to people.  Comparing local breeds of rabbits and exotic breeds.	Appreciation.  Care  Awareness  Fluency  Concern	Chart showin g differen t breeds exotic breeds.	Mk. Int. sci. pbk 4   Int. sci. sylla bus bk 4	
6	3	Keepin g rabbits	Buildin g a rabbit hutch	<b>Building a rabbit hutch</b> <ul style="list-style-type: none"> <li>□ The house of a domestic rabbit is called a hutch.</li> <li>□ A hutch should be able to protect rabbits from easy spread of</li> </ul>	<b>The learner;</b> <ol style="list-style-type: none"> <li>1. Describes the qualities of a good hutch.</li> <li>2. Mentions the types of hatches.</li> <li>3. draws and name the types</li> </ol>	<b>The learner;</b> <ol style="list-style-type: none"> <li>1. Pronounces, spells, reads writes and demonstrates meaning of words related to rabbits</li> <li>2. Reads,</li> </ol>	Guided discovery  Discussion  Observati on	Describing the qualities of a good hutch.  Mentioning the types of hatches. Drawing	Appreciation.  Care  Awareness	Chart showin g differen t types of hutches .	Mk. Int. sci. pbk 4	



				<p>diseases.</p> <p><b>Types of hutches.</b></p> <p>There are three types of hutches;</p> <ol style="list-style-type: none"><li>1. A traditional hutch</li><li>2. A morant hutch</li><li>3. A caged hutch <b>A</b></li></ol>	of hatches.	internalize and writes texts and questions related to rabbits	Illustration	and name the types of hatches.	Fluency  Concern		Int. sci. syllabus bk 4	
				 <p><b>morant hutch</b></p>								

6	4	Keepin g rabbits	Qualiti es of a good hutch	<b>Qualities of a good hutch</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> It should always be clean and dry.</li> <li><input type="checkbox"/> It should have enough air entering it.</li> <li><input type="checkbox"/> (A wire mesh allows free circulation of air in the hutch)</li> <li><input type="checkbox"/> It should be strong enough to protect the rabbits from wild animals and rain.</li> </ul>	<b>The learner;</b> 1. Describes the qualities of a good hutch.	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to rabbits 2. Reads, internalize and writes texts and questions related to rabbits	Guided discovery  Discussion  Observati on  Illustration	Describing the qualities of a good hutch.  Mentioning the types of hatches. Drawing and name the types of hatches.	Appreciation.  Care  Awareness  Fluency  Concern	Chart showin g differen t types of hutches	Mk. Int. sci. pbk 4   Int. sci. sylla bus bk 4	
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6	5		<b>Making a rabbit hutch</b>	<b>Making a rabbit hutch</b>  <b>What you need;</b> Small sticks Banana fibres paper box glue <b>What to do:</b> 1. Tie small sticks in two triangular shapes. 2. Get one long stick and use it to join the two triangular shapes. 3. Make a rectangular frame from sticks. Use banana fibres to make a net as shown. 4. Place the frame in number <b>2</b> onto the rectangular frame in number <b>3</b> . Join the edges using banana fibres. 6. Follow the same...	<b>The learner;</b> 1. Describes the steps involved when making a local caged hutch.	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to rabbits 2. Reads, internalize and writes texts and questions related to housing rabbits	Guided discovery  Discussion  Observation  Illustration	Describing the steps involved when making a local caged hutch.	Appreciation.  Care  Awareness  Fluency  Concern	Chart showing different types of hutches	Mk. Int. sci. pbk 4   Int. sci. syllabus bk 4	
5	6	<b>Keeping rabbits</b>	<b>Managing rabbits Feeding</b>	<b>Managing rabbits Feeding rabbits.</b> - Rabbits feed on different foods which	<b>The learner;</b> 1. Describes the steps involved when making a	<b>The learner;</b> 1. Pronounces, spells, reads writes and	Guided discovery  Discussion	Describing the steps involved when	Appreciation.  Care	Chart showing different	Mk. Int. sci. pbk	

			<b>g rabbits</b> .	end up providing a balanced diet to them. e.g. Pellets (these are commercial feeds) - banana peelings - sweet potato vines - leafy vegetables e.g. cabbage , carrots <b>Breeding of rabbits.</b> Breeding is the process through which animals give birth to their young ones. <b>Signs of a doe on heat.</b> -It moves up and down, all the time restless. - It lies on one side of its body. - It rubs its body against the hutch walls. <b>NB:</b> - A doe takes 30 days to produce. - A nest is prepared in the hutch.	local caged hutch.	demonstrates meaning of words related to housing rabbits 2. Reads, internalize and writes texts and questions related to housing rabbits	Observati on  Illustration	making a local caged hutch.	Awareness  Fluency  Concern	t types of hutches	4	
6	1	Keepin g	Hygien e in	<b>Hygiene in rabbits</b> <input type="checkbox"/> Rabbits should	<b>The learner;</b> 1. Describes the	<b>The learner;</b> 1. Pronounces,	Guided discovery	Describing the ways of	Appreciation.	Chalkb oard	Mk. Int.	

		<b>rabbits</b>	<b>rabbits</b>	<p>be kept in clean places and should be given clean drinking water.</p> <p><input type="checkbox"/> The hutch should be cleaned regularly.</p> <p><input type="checkbox"/> Feeding container should be cleaned very often.</p>	ways of promoting hygiene in a rabbit's hutch.	<p>spells, reads writes and demonstrates meaning of words related to hygiene in rabbits.</p> <p>2. Reads, internalize and writes texts and questions related to hygiene in rabbits.</p>	<p>Discussion</p> <p>Observation</p> <p>Illustration</p>	<p>promoting hygiene in a rabbit hutch.</p>	<p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>illustration.</p>	<p>sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
<b>6</b>	<b>2</b>	<b>Keeping rabbits</b>	<b>Common diseases of rabbits</b>	<p><b>Common disease of rabbits.</b></p> <ul style="list-style-type: none"> <li>- Ear canker</li> <li>- Coccidiosis</li> <li>- Colds</li> <li>- scuffles</li> </ul> <p><b>Signs and symptoms/ prevention and</b></p> <p><b>Treatment of common diseases of rabbits.</b></p>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Identifies the common diseases of rabbits.</li> <li>2. States the signs and symptoms diseases of rabbits.</li> </ol>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Pronounces, spells, reads writes and demonstrates meaning of words related to diseases of rabbits.</li> <li>2. Reads, internalize and writes texts and questions related to diseases of rabbits.</li> </ol>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p> <p>Illustration</p>	<p>Identifying the common diseases of rabbits.</p> <p>Stating the signs and symptoms diseases of rabbits.</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>Chalkboard illustration.</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	

6	3	Keeping rabbits	<b>Keeping Rabbit Records</b> <input type="checkbox"/> Records refer to written information on various activities carried out on a farm. <b>Types of records in rabbit keeping</b> 1. Sales and expenditure records 2. Labour records 3. Health records <b>Other records</b> <input type="checkbox"/> Number of rabbits on a farm. <input type="checkbox"/> Date of mating so as to prepare the nesting boxes where the doe will produce from. <b>Importance of record keeping.</b> <input type="checkbox"/> It enables a farmer to know whether he is making profits or losses. <input type="checkbox"/> It enables a farmer to know when to carry out	<b>The learner;</b> 1. Defines the term records. 2. Mentions the types of records kept on a rabbit farm. 3.. States the importance of keeping records kept on a rabbit	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to record keeping. 2. Reads, internalize and writes texts and questions related to record keeping.	Guided discovery Discussion Observation Illustration	Defining the term records. Mentioning the types of records kept on a rabbit farm. Stating the importance of keeping records kept on a rabbit	Appreciation. Care Awareness Fluency Concern	Chalkboard illustration.	Mk. Int. sci. pbk 4  Int. sci. syllabus bk 4	
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				some farm activities. □ It enables a farmer to get loans from banks.								
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## PRIMARY FOUR SCIENCE SCHEME OF WORK FOR TERM II, 2024

W K	P D	THEME	S/TOPIC	CONTENT	SUBJ. COMP'NCES	LANG. COMP'NCES	METHODS	ACTIVITIES	IND. OF LSV	INST.MAT	REF.	REM
1	1	OUR FOOD	CLASSES OF FOOD	<b>CLASSES OF FOOD</b> -Go Foods -Grow Foods -Glow Foods <b>Examples of each class of food. Go foods:-</b> maize, cassava , millet, bread <b>Grow foods:-</b> fish, meat , chicken, beans <b>Glow foods:-</b> fruits fresh leafy vegetables	<b>The learner;</b> -states classes of food -gives examples of class of food	<b>The learner;</b> Pronounces spells, reads, writes and demonstrates meaning of words related to classes of food.	Brain storming Guided discovery Class discussion	-reading and spelling words, - drawing the examples of the given foods.	Awareness, Care, appreciation	millet seeds cassava tubers, maize flour	Mk integrated science bk 4	
1	2	Our food	food values	<b>Food values</b> These are useful food substances that the body needs to live. <b>examples;</b> carbohydrates - vitamins -proteins -fats and oils -mineral salts <b>Carbohydrates</b> -They are also called energy giving foods.(GO- foods) -They provide energy	<b>The learner; -</b> names the food values -defines carbohydrates - gives examples to carbohydrates - state the importance of carbohydrates to the body.	<b>The learner;</b> Pronounces spells, reads, writes and demonstrates meaning of words related to food values and carbohydrates.	Brain storming Guided discovery Class discussion observation	Observing some examples of food stuffs rich in carbohydrates.	- Fluency , - observation, care, awareness	millet seeds cassava tubers, maize flour	Mk integrated science bk 4	




				<div>to the body.</div> <div><b><u>Examples of food</u></b></div> <div><b><u>stuffs</u></b></div> <div><b><u>that are rich in</u></b></div> <div><b><u>carbohydrates</u></b></div> <div>Millet, maize, cassava,</div> <div>sugar, bread, sweet</div> <div>potato.</div>								
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1	3	Our food	<p><b>vitamins and mineral salts</b></p> <p>These are healthy giving foods.</p> <p><b><u>examples of mineral salts;</u></b></p> <p>-calcium -phosphorous -magnesium -iodine - iron etc.</p> <p><b><u>Food staffs ( sources of mineral; salts) fruits</u></b></p> <p>-milk, liver, iodized salt, Vegetables, egg yolk, cereals, ripe banana, corns, etc.</p> <p><b><u>examples of vitamins;</u></b> -vitamins are given names of alphabet from A to E i.e. <b>Vitamin A,B,C,D,E</b></p> <p><b><u>sources of vitamins/food stuffs with vitamins</u></b></p>	<p><b>The learner;</b> - names food stuffs that are rich in mineral salts and vitamins. - defines vitamins and mineral salts -identifies some names given to minerals salts and vitamins</p>	<p><b>The learner;</b> Pronounces spells, reads, writes and demonstrates meaning of words related to mineral salts and vitamins</p> <p>heat energy to the body</p>	Brain storming Guided discovery Class discussion observation	Observing some examples of food stuffs rich in carbohydrate rates.	Fluency , appreciation, care.	iodized salt fruits leafy vegetables	Mk integrated science bk 4	P.4 curriculum
			fruits, leafy vegetables Yoghurt, carrots, etc.								

1	4	Our food	Food values	<p><b>PROTEINS, FATS AND OILS.</b></p> <p><b><u>proteins</u></b>          -Proteins are body building foods. <b><i>uses of proteins</i></b> -they build body cells          -they help to repair body tissues.</p> <p><b><u>sources/ foods rich in proteins</u></b> fish, meat, eggs, beans, chicken <b><i>uses of proteins</i></b> -they build body cells          -they help to repair body tissues.</p> <p><b><u>sources/ foods rich in proteins</u></b> fish, meat, eggs, beans, chicken</p> <p><b>Fats and oils;</b>          These are energy giving foods that provide <b><u>sources/ foods that are rich in fats and oils</u></b>          simsim, meat</p>	<p><b>The learner;</b> - names food stuffs that are rich in proteins          -defines proteins and fats and oils. - identifies food stuffs rich in fats and oils</p>	<p><b>the learner;</b>          Pronounces spells, reads, writes and demonstrates meaning of words related to fats and oils and proteins</p>	Brain storming Guided discovery Class discussion observation	Observing some examples of food stuffs rich in carbohydrates	Fluency , appreciation, care	iodized salt fruits leafy vegetables	Mk integrated science bk4 4	
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1	5	Our food	<b>Deficiency diseases</b>  <b>deficiency diseases;</b> -These are diseases one gets when their bodies does not have enough of essential food values <b>Examples of deficiency diseases</b> -Night blindness -Kwashiorkor -Beriberi -Pellagra -Marasmus -Scurvy -Anaemia -Goitre -Rickets <b>KWASHIORKOR</b> -it is cause by lack of enough proteins in the body <b>signs of a child with kwashiorkor</b> -swollen belly -swollen moon face	<b>The learner;</b> - defines deficiency diseases - identifies examples of deficiency diseases - states the cause of kwashiorkor	<b>the learner;</b> Pronounces spells, reads, writes and demonstrates meaning of words related to deficiency diseases	Brain storming Guided discovery Class discussion observation	Observing some examples of food stuffs rich in carbohydrates.	Fluency , appreciation, care	iodized salt fruits leafy vegetables	Mk integrated science bk4	
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1	6	Our food	<p><b>marasmus and night blindness</b></p> <p><b>MARASMUS</b>          -it is caused by lack of enough carbohydrates in the body  <b>signs of a child with marasmus</b>          -swollen belly          -always hungry          -the face looks like that an old person - wasted muscles(thin body)</p>  <p><b>NIGHT BLINDNESS</b>          it is also called poor night vision -it is caused by shortage of <b>vitamin A</b> in the body <b>prevention of night blindness</b>          -eat foods rich in vitamin A e.g. cereals</p>	<p><b>The learner;</b> - states the cause of kwashiorkor          -states the signs of marasmus in children - states the cause of night blindness - gives ways of preventing marasmus and kwashiorkor</p>	<p><b>the learner;</b>          Pronounces spells, reads, writes and demonstrates meaning of words related to night blindness, marasmus</p>	<p>observation, guided discovery, guided class discussion question and answer</p>	<p>Observing a chart showing a child suffering from marasmus</p>	<p>Fluency , appreciation, care</p>	<p>charts with children suffering from marasmus</p>		
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2	1	Our food	scurvy	<b>SCURVY</b> -This is a deficiency disease caused by lack of vitamin <b>C</b> <u><b>signs of scurvy</b></u> -bleeding of the gums - poor healing of	<b>The learner;</b> - states the cause of kwashiorkor -states the signs of marasmus in children	<b>the learner;</b> Pronounces spells, reads, writes and demonstrates meaning of	observation, guided discovery, guided class discussion question	Observing on a chart showing different signs of beriberi	Fluency, appreciation, care	charts with children suffering from scurvy	Mk int. sci. pbk 4	
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				wounds <u><b>BERI BERI</b></u> -It is caused by shortage of vitamin B <sub>1</sub> in the body. <u><b>signs of Beriberi</b></u> - swelling of arms and legs -muscle spasms	-states the cause of night blindness - gives ways of preventing marasmus and kwashiorkor	words related to scurvy and beriberi	and answer				Pry. 4 sci. curr.  New fount. Pbk 4	
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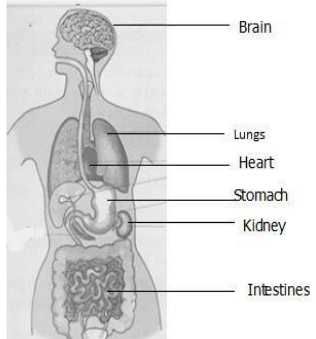
2	3	Our food	Goitre	<p><b>Goitre</b> This is the swelling if the thyroid gland in the throat. it is caused by lack of enough of iodine mineral</p> <p><b>Rickets</b> This a deficiency diseases caused by lack of enough of vitamin <b>D</b> <i><b>signs of rickets</b></i> in children -bones become soft and swollen -bones become and form a bow-like shape <i><b>prevention of rickets</b></i> -feed on feeds rick in vitamin D -expose the body on sunshine</p>	<p><b>The learner;</b> - states the cause of kwashiorkor -states the signs of marasmus in children - states the cause of night blindness - gives ways of preventing goiter and rickets.</p>	<p><b>the learner;</b> Pronounces spells, reads, writes and demonstrates meaning of words related to rickets and goitre.</p>	<p>Observation guided discovery,</p> <p>guided class discussion</p> <p>question and answer</p>	<p>Observing on a chart showing different signs Of rickets</p>	<p>Fluency , appreciation, care</p>	<p>charts with children suffering from rickets</p>	<p>Mk int. sci. pbk 4</p> <p>Pry. 4 sci. curr.</p> <p>New fount. Pbk 4</p>	
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2	4	Our food	anemia	<p><b>Anaemia</b> tis sis a body condition caused by lack of iron or blood in the body.</p> <p><b>signs of anaemia</b> - pale gums -white finger nails - extreme body weakness and tiredness.</p>	<p><b>The learner;</b> - states the cause of anaemia -states the signs of anemia in children</p>	<p><b>the learner;</b> Pronounces spells, reads, writes and demonstrates meaning of words related to anemia</p>	<p>observatio n, guided discovery, guided class discussion question and answer</p>	<p>Observing on a chart showing different signs Of anemia</p>	<p>Fluency , appreci ation, care</p>	<p>charts with children suffering from anemia</p>	<p>Mk int. sci. pbk 4</p> <p>Pry. 4 sci. curr.</p>	
2	5	Our food	Food contamination	<p><b>How food gets contaminated;</b> -serving food on dirty - serving food with dirty hands -leaving cooked food uncovered</p> <p><b>Dangers of food contamination</b> - easy spread of diarrhea diseases. prevention of food contamination -washing hands before handling food -serving food in clean containers -keeping left over food well covered</p>	<p><b>the learner;</b> Pronounces spells, reads, writes and demonstrates meaning of words related to food contamination.</p>	<p><b>the learner;</b> Pronounces spells, reads, writes and demonstrates meaning of words related to food contamination</p>	<p>observatio n, guided discovery, guided class discussion question and answer</p>	<p>Observing on a chart showing different ways we prevent food contamin ation.</p>	<p>Fluency , appreci ation, care</p>	<p>charts showin g ways of prevent ing food contam ination</p>	<p>Mk int. sci. pbk 4</p> <p>Pry. 4 sci. curr.</p> <p>New fount. Pbk 4</p>	

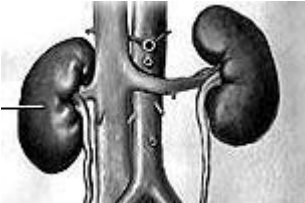
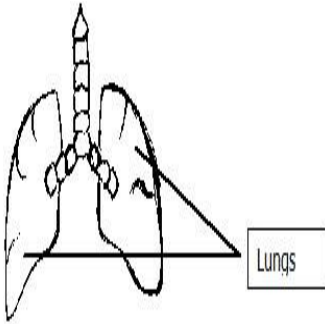


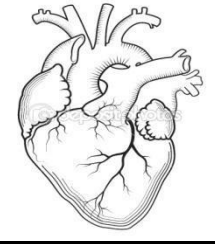
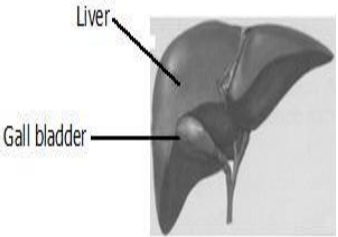
2	6	Our food	Preparation of a simple local dish at home.	<p><b>How to prepare matoke locally</b> steps: - peeling -boiling -steaming</p> <p><b>note;</b> Matoke can also be prepared by roasting.</p>	<p><b>the learner;</b> demonstrates ways of preparing matoke at home.</p>	<p><b>the learner;</b> Pronounces spells, reads, writes and demonstrates meaning of words related to major organs of the human body.</p>	<p>observation, guided discovery, guided class discussion question and answer</p>	<p>-peeling and practicing preparing a local dish of matoke</p>	<p>self-discovery, -accuracy, self-esteem, care</p>	<p>Pictures showing people peeling matoke knife, banana, water,</p>	<p>Mk int. sci. pbk 4</p> <p>Pry. 4 sci. curr.</p> <p>New fount. Pbk 4</p>	
3	1	Human body organs	major organs of the body	<p><b>Major organs of the body</b></p> <p>-eyes, - ears, - nose, - brain, kidney, -stomach</p>	<p><b>the learner;</b>names the major body organs -draws the structure that shows the major organs of the human body.</p>	<p><b>the learner;</b> Pronounces spells, reads, writes and demonstrates meaning of words related to human body organs</p>	<p>observation, guided discovery, guided class discussion question and answer</p>		<p>self-discovery, -accuracy, self-esteem, care</p>	<p>a chart with d</p>	<p>Mk int. sci. pbk 4</p> <p>Pry. 4 sci. curr.</p> <p>New fount. Pbk 4</p>	

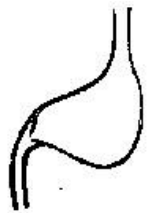
**Internal body organs**




(diagram)

3	2	Human body organs	kidneys Human beings have two bean shaped kidneys. <b>The structure of the kidneys.</b> 	The learner; 1. Describes kidneys. 2. Draws and labels the parts of kidneys.	The learner; 1.pronounces,spells,reads,writes and demonstrates meaning of words related to kidneys	Brain storming Guided discovery Class discussion	Drawing the structure of the kidney	self-discovery, -accuracy, self-esteem, care	A chart showing the structure of the kidneys	Mk int. sci. pbk 4  Pry. 4 sci. curr.  New fount. Pbk 4	
3	3	Human body organs	lungs <b>The lungs</b> There are two lungs in the human body <b>The structure of lungs</b> 	The learner; 1. Draws and labels the structure of lungs.	The learner; Pronounces,spells,reads writes and demonstrates meaning of words related to lungs.	Brain storming Guided discovery Class discussion	Drawing the structure of the lungs	Critical thinking Appreciation Fluency Care	An illustration of the lungs on a chart.	Mk int. sci. pbk 4  Pry. 4 sci. curr.  New fount. Pbk 4	

3	4	Human body organs	The heart	<p><b>The lungs</b> The heart is located in the chest cavity between the lungs.</p> <p><b><u>Structure of the heart</u></b></p> 	<p>The learner; 1.Draws the structure of the heart. 2. Answers the given questions on the heart.</p>	<p>The learner; Pronounces,spells reads, reads writes and demonstrates meaning of words related to the heart.</p>	<p>Observation. Guided discovery Class discussion</p>	<p>Drawing the structure of the heart</p>	<p>Fluency  Appreciation  Care  Kindness</p>	<p>Drawing diagrams showing lungs</p>	<p>Mk int. sci. pbk 4  Pry. 4 sci. curr.  New fount. Pbk 4</p>	
3	5	Human body organs	The liver	<p><b>The liver</b> - This is found below the lungs in the abdominal cavity - The liver produces bile which helps to break down food into small particles.</p> 	<p>The learner; 1. Draws the structure of the liver. 2. Answers given questions on the liver</p>	<p>The learner;</p>	<p>Observation. Guided discovery Class discussion</p>	<p>Observation Drawing the structure of the liver.</p>	<p>Fluency  Appreciation  Care  Kindness</p>		<p>Mk int. sci. pbk 4  Pry. 4 sci. curr.  New fount. Pbk 4</p>	

3	6	Human body organs	The stomach	<p><b>The structure of the stomach</b></p> <ul style="list-style-type: none"> <li>- The stomach is one of the organs of the digestive system</li> <li>- The stomach stores food for some time</li> </ul> <p><b>Structure of the</b></p>  <p><b>stomach</b></p>	<p><b>The learner;</b> 1.draws the structure of the stomach 2.answers the questions</p>	<p><b>The learner;</b> Pronounces,spells,read,writes and demonstrates words related to the liver.</p>	<p>Observation. Guided discovery Class discussion</p>	<p>Drawing the structure of the stomach.</p>	<p>Drawin g diagrams showin g lungs.</p>	<p>a chart with diagrams of the stomach</p>	<p>Mk int. sci. pbk 4</p> <p>Pry. 4 sci. curr.</p> <p>New fount. Pbk 4</p>	
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4	1	Human body organs	<p>The brain of the brain</p> <p>This is the soft organ protected by the skull. The brain controls all activities of the body</p> <p><b>Structure</b></p> <p>Structure of the brain</p>  <p><b>Functions of the brain</b></p> <p>It stores information For thinking For reasoning</p>	<p>The learner; 1. Draws the structure of the brain 2. Gives the functions of the brain.</p>	<p>The learner; Pronounces, spells, reads, writes and demonstrates words related to the brain</p>	<p>Observation. Guided discovery Class discussion</p>	<p>Drawing the structure of the brain</p>	<p>Critical thinking Appreciation fluency</p>	<p>a chart with diagrams of the brain</p>	<p>Mk int. sci. pbk 4</p> <p>Pry. 4 sci. curr.</p> <p>New fount. Pbk 4</p>	
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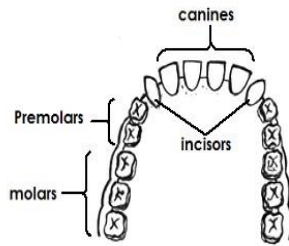
4	2	Human body organs	How the Human body Works	<p><b>How the human body works</b></p> <ul style="list-style-type: none"> <li>□ The human body takes in food through the mouth oxygen during breathing.</li> <li>□ Breathing is the taking in and out of oxygen.</li> <li>□ The human body transports food and oxygen to different parts of the body.</li> <li>□ The human body uses food and oxygen to get energy. Food and oxygen is moved around the body by the blood.</li> <li>□ The human body removes wastes</li> </ul> <p><b>Examples of waste materials</b></p> <ul style="list-style-type: none"> <li>□ Urine</li> <li>□ sweat</li> <li>□ carbon dioxide</li> </ul>	<p><b>The learner;</b></p> <p>1. describes how the body works.</p> <p>2. Mentions the examples of waste materials.</p>	<p><b>The learner;</b></p> <p>1. Pronounces, spells, reads writes and demonstrates meaning of words related to how the human body works.</p> <p>2. Reads, internalize and writes texts and questions to related how the human body works.</p>	<p>Guided discovery</p> <p>Discussion</p> <p>observation</p>	<p>Describing how the human body works.</p> <p>Mentioning example of waste material of the human body.</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>Chalkboard illustration.</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
4	3	The teeth	Sets of teeth	<p><b>Sets of teeth</b></p> <ul style="list-style-type: none"> <li>□ Humans beings grow two sets of teeth in their life time namely,</li> <li>□ Milk teeth</li> </ul>	<p><b>The learner,</b></p> <p>1. Describes the sets of teeth.</p>	<p><b>The learner;</b></p> <p>1. Pronounces, spells, reads writes and demonstrates meaning of</p>	<p>Guided discovery</p> <p>Discussion</p>	<p>Describing the sets of teeth i.e. The milk teeth and</p>	<p>Appreciation.</p> <p>Care</p>	<p>A chart showing sets of teeth</p>	<p>Mk. Int. sci. pbk 4</p>	

					2. Describes the milk teeth							
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				<input type="checkbox"/> Permanent teeth <b>Milk teeth</b> <input type="checkbox"/> Milk teeth are the first set of teeth in children. <input type="checkbox"/> They are twenty in number <input type="checkbox"/> They start appearing in children at the age of 5-9 months <input type="checkbox"/> Milk teeth start falling out at the age of 5-6 years	and the permanent teeth	words related sets of teeth e.g. Milk teeth, canine, incisors and premolars.	observation	permanent teeth.	Awareness		Int. sci. syllabus bk 4	
						2. Reads, internalize and writes texts and questions related to sets of teeth.			Fluency			
									Concern			



- ☐ The incisors are the first to grow and the



first to fall out

4	4	The teeth	Types of teeth	<b>Types of teeth</b> i) Canines ii) Incisors iii) Pre Molar iv) Molars <b>Canines</b> <input type="checkbox"/> Canines are sharp, and pointed.	<b>The learner;</b> 1. States the types of teeth. 2. Describes the canine and incisor teeth. 3. States the importance of the canine and incisor teeth.	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related types of teeth e.g. canine,	Guided discovery  Discussion  Observatio	Stating the types of teeth.  Describin g the incisors and canine	Appreciation.  Care  Awareness	A chart showing incisors and canine teeth.	Mk. Int. sci. pbk 4  Int.	
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				<input type="checkbox"/> They are used for tearing food.								
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**Structure of a canine tooth**



☐ **Adaptation to its function**

- ☐ They are sharp and pointed for tearing food

**Incisors**

- ☐ They are chisel shaped
- ☐ They have one root



**Structure of an incisor**

**Adaptation to its function**

- ☐ They are chisel shaped for cutting. ☐ There are four incisors in each jaw.

4. Describes the adaptation of the canines and incisor teeth to their function.

incisors, molars and premolars.  
2. Reads, internalize and writes texts and questions related to sets of teeth.

n

teeth.


Stating the functions of the canine and incisor teeth.

Describing the adaptations of the canines and incisor teeth to their functions.

Fluency

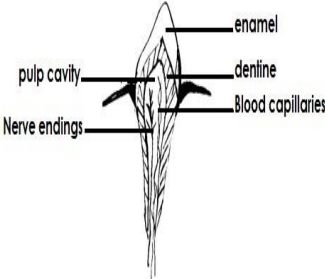
Concern

sci. syllabus bk 4

4	5	Types of teeth	<p><b>Pre molars And Molars</b></p> <p><b>Pre molars</b></p> <ul style="list-style-type: none"> <li>□ They are broad at the top with two cups/ridges</li> <li>□ They have one root.</li> </ul> <p><b>Structure of a pre molar</b></p>  <p><b><u>Adaptation to its function</u></b></p> <ul style="list-style-type: none"> <li>□ They have broad tops with ridges for crushing food.</li> </ul> <p>□ <b>Molars</b></p> <ul style="list-style-type: none"> <li>□ They have broad wide tops with 3-5 ridges.</li> </ul> <p><b>Structure of a molar</b></p> <p><b><u>Adaptation to its function</u></b></p> <ul style="list-style-type: none"> <li>□ They have broad tops with cups for crushing food</li> </ul>	<p><b>The learner;</b> 2. Describes the premolars and molar teeth. 3. States the importance of the pre molars and molars teeth. 4. Describes the adaptation of the molars and pre molars to their function.</p>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Pronounces, spells, reads writes and demonstrates meaning of words related types of teeth e.g. canine, incisors, molars and premolars.</li> <li>2. Reads, internalize and writes texts and questions related to sets of teeth.</li> </ol>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p>	<p>Describing the molars and pre molars teeth.</p> <p>Stating the functions of the molars and pre molars teeth.</p> <p>Describing the adaptations of the molars and pre molars teeth. to their functions.</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>A chart showing molars and pre molars teeth.</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
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4	6	The teeth	Regions of the teeth	<b>Regions of a tooth</b> <input type="checkbox"/> A tooth has three regions namely; a) The crown b) The neck c) The root	<b>The learner;</b> 2. Identifies the regions of the tooth. 3. Draws and labels the regions of the	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words	Guided discovery  Discussion	Identifying regions of the tooth.  Drawing	Appreciation.  Care	A chart showing regions of the tooth	Mk. Int. sci. pbk 4	
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					tooth.	related regions of the tooth 2. Reads, internalize and writes texts and questions related to regions of the tooth	Observation	and labeling the regions of the tooth	Awareness  Fluency  Concern		Int. sci. syllabus bk 4	
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5	1	The teeth	<b>Parts of a tooth</b>	<b>Internal structure of a tooth</b>  <p> <b>tooth</b>  <b>The enamel</b>  <b>The dentine</b>  <b>The pulp cavity</b>  <b>Nerve endings</b>  <b>Blood capillaries</b> </p>	<b>The learner;</b> <b>1.</b> Draws and labels parts of a canine and molar tooth	<b>The learner;</b> <b>1.</b> Pronounces, spells, reads writes and demonstrates meaning of words related parts of the tooth <b>2.</b> Reads, internalize and writes texts and questions related to parts of the tooth	Guided discovery  Discussion  Observation	Drawing the structure of the tooth.  Labeling the parts of a tooth.	Appreciation.  Care  Awareness  Fluency  Concern	A chart showing the structure of a tooth	Mk. Int. sci. pbk 4  Int. sci. syllabus bk 4	
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5	2	<b>The teeth</b>	<b>Parts of the tooth</b> <b>Functions of parts of at tooth</b> <u><b>The enamel</b></u> <input type="checkbox"/> It is the hardest outer part of the tooth. <input type="checkbox"/> The enamel protects the inside part of the tooth to wear and tear. <u><b>The dentine</b></u> <input type="checkbox"/> It is the biggest part of a tooth. <input type="checkbox"/> The dentine contains the pulp cavity and living cells through which it receives food. <u><b>The pulp cavity</b></u> <input type="checkbox"/> It is the sensitive part of the tooth <input type="checkbox"/> The pulp cavity contains blood vessels and nerves which are sensitive to heat coldness and pain <u><b>Nerve endings</b></u> <input type="checkbox"/> They pick nerve signals/ messages and send them to the brain for interpretation. <b>Blood capillaries</b> <input type="checkbox"/> They send blood,	<b>The learner'</b> 1. States the functions of parts of the tooth.	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related parts of the tooth 2. Reads, internalize and writes texts and questions related to parts of the tooth	Guided discovery  Discussion  Observation	Stating the functions of parts of the tooth  Labeling the parts of a tooth.	Appreciation.  Care  Awareness  Fluency  Concern	A chart showing the structure of a tooth	Mk. Int. sci. pbk 4  Int. sci. syllabus bk 4	
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				oxygen and digested food to the tooth.								
5	3	The teeth		<p><b>Care of our teeth</b></p> <ul style="list-style-type: none"> <li>□ We need to care for our teeth and keep them healthy.</li> <li>□ The general cleanliness for our mouth is called <b>oral hygiene</b>.</li> </ul> <p><b>Ways of cleaning for the teeth</b></p> <ul style="list-style-type: none"> <li>□ Brushing the teeth every after a meal to remove the food remains.</li> <li>□ By dental flossing to remove food particles between the teeth.</li> </ul> <p><b>Things we use to care for our teeth</b></p> <ul style="list-style-type: none"> <li>□ Tooth brush</li> <li>□ Tooth paste</li> <li>□ Dental floss</li> <li>□ Clean water</li> </ul>	<p><b>The learner;</b></p> <p>1. Identifies the ways of caring for the teeth. 2. States the materials used to clean teeth.</p> <p>3. Draws the materials used to clean teeth.</p>	<p><b>The learner;</b></p> <p>1. Pronounces, spells, reads writes and demonstrates meaning of words related to care for the teeth.</p> <p>2. Reads, internalize and writes texts and questions related to care for the teeth.</p>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p> <p>Illustration</p> <p>Demonstration</p>	<p>Identifying the ways of caring for the teeth.</p> <p>Stating the materials used to clean teeth.</p> <p>Drawing the materials used to clean teeth.</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>A tooth brush, tooth paste, dental floss.</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	



5	4	The teeth	<p><b>Diseases of the teeth</b></p> <ol style="list-style-type: none"> <li>1. Tooth decay( dental caries)</li> <li>2. Gum diseases(gingivitis)</li> <li>3. Dental plague</li> <li>4. Periodontal disease</li> </ol> <p><b>Refer to the table of diseases of the teeth in the lesson notes.</b></p> <p><b>Disorders of the teeth</b></p> <p><input type="checkbox"/> <b>Disorders of the teeth</b></p> <p>i) Poor growth of teeth (malocclusion) ii) broken or cracked teeth</p> <p><input type="checkbox"/> <b>Control of teeth disorders</b></p> <p><input type="checkbox"/> Avoid biting hard things.</p> <p><input type="checkbox"/> Avoid rough games.</p>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1.Outlines the diseases of the teeth.</li> <li>2. States the signs and symptoms of the diseases of the teeth.</li> <li>3. Mentions the ways of preventing the diseases of the teeth.</li> <li>4. Identifies the disorders of the teeth and how they can be controlled.</li> </ol>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Pronounces, spells, reads writes and demonstrates meaning of words related to diseases of the teeth.</li> <li>2. Reads, internalize and writes texts and questions related to diseases of the teeth.</li> </ol>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p> <p>Illustration</p> <p>Demonstration</p>	<p>Outlining the diseases of the teeth.</p> <p>Stating the signs and symptoms of diseases of the teeth.</p> <p>Mentioning ways of preventing diseases of the teeth</p>	<p>Appreciation.</p> <p>Care</p> <p>Awareness</p> <p>Fluency</p> <p>Concern</p>	<p>Pictures of decayed teeth</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
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5	5	Sanitation	Importance of good sanitation.	<p><b>sanitation</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Sanitation is the general cleanliness of our environment.</li> <li><input type="checkbox"/> <b>Importance of good sanitation in our environment</b></li> <li><input type="checkbox"/> Carrying out proper sanitation keeps the place free from vectors</li> <li><input type="checkbox"/> Proper sanitation prevents the diseases in an area</li> <li><input type="checkbox"/> Proper sanitation prevents bad smell.</li> <li><input type="checkbox"/> Proper sanitation prevents <b>water contamination</b></li> </ul>	<p>The learner;</p> <ol style="list-style-type: none"> <li>1. Defines sanitation.</li> <li>2. States the activities that can be done to promote proper sanitation.</li> <li>3. gives the importance of good sanitation in our environment</li> </ol>	<p><b>The learner;</b></p> <ol style="list-style-type: none"> <li>1. Pronounces, spells, reads writes and demonstrates meaning of words related to sanitation</li> <li>2. Reads, internalize and writes texts and questions related to sanitation.</li> </ol>	<p>Guided discovery</p> <p>Discussion</p> <p>Observation</p> <p>Illustration</p> <p>Demonstration</p>	<p>Answers questions given on how to promote sanitation.</p>	<p>Appreciation. Awareness Care.</p>	<p>Water Broom hoe rake</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllabus bk 4</p>	
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5	6		Germ s and Diseas es	<p>What are germs? Germ s are small organism s that cause disease s.</p> <p><u>Note:</u> We cannot see germs with our naked eye s (a microscope is used to detect germs)</p> <p><b><u>Examples of germs</u></b> Virus Bacteria</p>	<p>The learner; Define s germs. 2. State s example s of germs. 3. Mention s place s where germs can be found.</p>	<p><b>The learner;</b> 1. Pronounce s, spell s, read s and demonstrate s meaning of word s related to sanitation. 2. Read s, internalize and write s text s and question s related to sanitation.</p>	<p>Guided discovery</p> <p>Discussion</p> <p>Observatio n</p> <p>Illustration</p>	<p>Answerin g question s. Reading and writing work.</p>	<p>Apprecia tion. Awarene ss Care.</p>	<p>Workca rds</p>	<p>Mk. Int. sci. pbk 4</p> <p>Int. sci. syllab us bk 4</p>	
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				<p>Protozoa Fungi <b><u>Places where germs can be found(habitats for germs)</u></b> In un boiled water In the soil In air In human and animal faeces On plants In human body and other animals In dirty places like latrine</p>			<p>Demonstra tion</p>					
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6	1			<p><b>Ways through which germs are spread.</b> Through drinking contaminated water. Through eating contaminated food. Through bites of insects and animals. Through breathing</p>	<p><b>The learner;</b> 1.Mentions the ways through which germs are spread 2.names the diseases spread through the given ways on the table.</p>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to sanitation. 2. Reads, internalize and writes texts and questions related to sanitation.</p>	<p>Discussion</p> <p>Observation</p> <p>Illustration</p> <p>Demonstration</p>	<p>Mentioning ways through which germs are spread</p>	<p>Audibility Critical thinking fluency</p>	<p>A chart showing the stages in the 4fs.</p>	<p>Comprehensive science book 4 Primary curriculum book4</p>	
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				<p>contaminated air. Through contact with people having germs.</p> <p><b><u>Table showing ways germs are spread and their causative agents</u></b></p>								
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6	2	sanitation	germs	<p><b>The 4fs germ path and economic importance</b></p> <p>Is the way germs are spread by houseflies through faeces,flies ,food fingers(4fs) Flies carry germs on their legs wings and hairy bodies from faeces onto our food.</p>	<p><b>The learner;</b> 1.writes 4fs in full. 2.describes the stages of the 4fs path.</p>	<p><b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to4fs. 2. Reads, internalize and writes texts and questions related to 4fs.</p>	<p>Discussion</p> <p>Observation</p> <p>Illustration</p> <p>Demonstration</p>	<p>Describing stages in the 4fs germ path.</p>	<p>audibility Critical thinking fluency</p>	<p>Chart showing the 4fs germ path</p>	<p>Comprehensive science book 4 Primary curriculum book4</p>	
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			<p><b>diseases</b></p>	<p><b>Diseases</b> A disease is an illness of the body which brings disorders</p> <p><b>Diseases spread due to 4fs.</b> Typhoid Diarrhea Bilharzia. Dysentery malaria</p>	<p><b>The learner;</b> <b>1.</b>defines the term disease. <b>2.</b> lists diseases that are spread through 4fs</p>	<p><b>The learner;</b> <b>1.</b> Pronounces, spells, reads writes and demonstrates meaning of words related to diseases spread through 4fs. <b>2.</b> Reads, internalize and writes texts and questions related to 4fs.</p>	<p>Discussion</p> <p>Observation</p> <p>Illustration</p> <p>Demonstration</p>	<p>Listing diseases that are spread through 4fs.</p>	<p>audibility Critical thinking fluency</p>	<p>Work cards showing diseases spread through 4fs.</p>	<p>Comprehensive science book 4 Primary curriculum book4</p>	<p>w</p>
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6	3		<b>Ways of protecting against germs and diseases</b>	<b>Ways of protecting against germs and diseases</b> Keeping our homes and school clean. Cleaning and covering latrines. Keeping our kitchen clean. Covering our food properly.	The learner; 1.mentions Ways of protecting against germsand diseases	<b>The learner;</b> 1. Pronounces, spells, reads writes and demonstrates meaning of words related to protection against germs and diseases 2. Reads, internalize and writes texts and questions related to germs and	Discussion  Observation  Illustration  Demonstration	.mentioning the Ways of protecting against germsand diseases	audibility Critical thinking fluency	environ ment	Comp rehen sive scien ce book 4 Primar y curric ulum book4	
				Washing hands before eating food. Washing and ironing clothes and beddings. Cutting tall grass around our homes.		diseases						