TETU-NORTH ZONE SCHEME OF WORK

GRADE 8 INTEGRATED SCIENCE SCHEMES OF WORK TERM 2 2025

TEACHER'S NAME:..... SCHOOL:……. TSC NUMBER: ……

Week	Lesson	Strand	Sub-strand	lesson-Learning outcomes	Learning Experience	Key Inquiry Question(S)	Learning Resources	Assessment Methods	Reflection
1	OPENER ASSESSMENT.								
2	1	LIVING THINGS AND THEIR ENVIRONMENT	Definition of the cell.	By the end of the lesson the learner should be able to; i. Identify the unicellular and multicellular organisms. ii. Describe the structure of the unicellular and multicellular organisms. iii. Appreciate the role of unicellular and multicellular organism in the environment.	Observe a picture showing both unicellular and multicellular organism. Watch a video showing the structure of unicellular and multicellular organism. Draw the structure of unicellular and multicellular organism.	What is a cell?	Active; Integrated science Learner's Book Grade 8 pg.74 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
		LIVING THINGS AND THEIR ENVIRONMENT	Definition of the cell.	By the end of the lesson the learner should be able to; i. State the various processes that occur in a cell. ii. Describe the various processes that occur in a cell. iii. Appreciate the processes that occurs in a cell.	Watch a video showing the processes that occurs in a cell. Observe pictures showing various processes that occurs in a cell. In groups learners to discuss the processes that occurs in a cell.	What is a cell?	Active; Integrated science Learner's Book Grade 8 pg.74 Picture Video Charts	Oral questions Oral Report Observation Written exercise	

	3	LIVING THINGS AND THEIR ENVIRONMENT	Cell structure as seen under a light microscope. (the light microscope)	By the end of the lesson the learner should be able to; i. State the parts of a microscope. ii. Describe the functions of the various parts of a light microscope. iii. Enjoy the use a light microscope.	In groups, learners to label the parts of a real microscope. In groups, learners to discuss the functions of various parts of a microscope. Learners to draw a microscope.	What are some of the parts of a microscope?	Active; Integrated science Learner's Book Grade 8 pg.75 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	4	LIVING THINGS AND THEIR ENVIRONMENT	Cell structure as seen under a light microscope.(plant cell)	By the end of the lesson the learner should be able to; i. State the parts of a plant cell. ii. Describe the adaptations of the plant cell to its function. iii. Appreciate the need for a plant cell in life.	Learners to observe a picture showing the parts of a plant cell. In groups, learners to discuss the functions of parts of a plant cell. In groups, learners to discuss the adaptations of plant cell to its function.	What are some of the parts of a plant cell?	Active; Integrated science Learner's Book Grade 8 pg.76 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
		LIVING THINGS AND THEIR ENVIRONMENT	Cell structure as seen under a light microscope.*(plant cell)*	By the end of the lesson the learner should be able to; i. State the functions of parts of a plant cell. ii. Describe the functions of parts of a plant cell. iii. Appreciate the need for a plant cell in life.	Learners to watch a video showing the parts of a plant cell. In groups, the learners to discuss the functions of parts of a plant cell. In pairs, the learners to draw the parts of plant cell.	What are some of the parts of a plant cell?	Active; Integrated science Learner's Book Grade 8 pg. 76 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
3	**1**	LIVING THINGS AND THEIR ENVIRONMENT	Cell structure as seen under a light microscope.*(functions of parts of a plant cell)*	By the end of the lesson the learner should be able to; i.State the functions of parts of a plant cell. ii. Describe the functions of parts of a plant cell.	Learners to watch a video showing the parts of a plant cell. In groups, the learners to discuss the functions of parts of a plant cell.	What are some of the parts of a plant cell?	Active; Integrated science Learner's Book Grade 8 pg.77 Picture Video Charts	Oral questions Oral Report Observation Written exercise	

				iii. Appreciate the need for a plant cell in life.	In pairs, the learners to draw the parts of plant cell.				
	2	LIVING THINGS AND THEIR ENVIRONMENT	Cell structure as seen under a light microscope.*(animal cell)*	By the end of the lesson the learner should be able to; i.State the functions of parts of an animal cell. ii. Describe the adaptations of animal cell to its function. iii. Appreciate the need for an animal cell in animals.	Learners to observe a picture showing the parts of an animal cell. In groups the learners to discuss the functions of parts of a plant cell. In groups the learners to discuss the adaptation of an animal cell to its function.	What are some of the parts of an animal cell?	Active; Integrated science Learner's Book Grade 8 pg.78 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
		LIVING THINGS AND THEIR ENVIRONMENT	Cell structure as seen under a light microscope.*(animal cell)*	By the end of the lesson the learner should be able to; i.State the functions of parts of an animal cell. ii. Describe the functions of an animal cell. iii. Appreciate the need for animal cell.	Learners to watch a video showing the parts of an animal cell. In groups, the learners to discuss the functions of parts of an animal cell. In pairs, the learners to draw an animal cell.	What are some of the parts of an animal cell?	Active; Integrated science Learner's Book Grade 8 pg.79 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	4	LIVING THINGS AND THEIR ENVIRONMENT	Cell structure as seen under a light microscope.(animal cell)	By the end of the lesson the learner should be able to; i.State the functions parts of an animal cell. ii. Describe the functions of parts of an animal cell. iii. Appreciate the need for various parts of an animal cell.	Learners to watch a video showing the parts of an animal cell. In groups, the learners to discuss the functions of parts of an animal cell. In pairs, the learners to draw an animal cell.	What are some of the parts of an animal cell?	Active; Integrated science Learner's Book Grade 8 pg.80 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	5	LIVING THINGS AND THEIR ENVIRONMENT	Cell structure as seen under a light microscope.*(comparis*	By the end of the lesson the learner should be able to;	In groups, learners to discuss the similarities	How is the plant cell	Active; Integrated science	Oral questions Oral Report	

			on between plant and animal cell)	i.State the similarities and difference between an animal and a plant cell. ii. Describe the similarities and differences between an animal and a plant cell. iii. Appreciate the similarities and differences between an animal and a plant cell.	between plant and animal cell. In groups, learners to discuss the difference between plant and animal cell.	different from an animal cell? What are the similarities between an animal cell and a plant cell?	Learner's Book Grade 8 pg.81 Picture Video Charts	Observation Written exercise	
4		LIVING THINGS AND THEIR ENVIRONMENT	Preparation of temporary slides of plant cells. *(plant cell as observed under a light microscope)*	By the end of the lesson the learner should be able to; i. State the various parts of a light microscope. ii. Describe how to use the light microscope with a permanent slide of a plant cell. iii. Appreciate the use of a permanent slide.	Learners to observe a picture showing the parts of a microscope. In groups, learners to demonstrate how to use a microscope with a permanent slide. In pairs, learners to draw the structure of a plant cell as observed under a light microscope with a permanent slide.	Name the structures of a plant cell?	Active; Integrated science Learner's Book Grade 8 pg.82 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	2	LIVING THINGS AND THEIR ENVIRONMENT	Preparation of temporary slides of plant cells.*(observation of a temporary slide containing plant cell)*	By the end of the lesson the learner should be able to; i.State the various apparatus used to prepare a temporary slide. ii. Describe how to prepare a temporary slide of a plant cell. iii. Appreciate the need for preparing a	In groups, learners to label the apparatus used to prepare a temporary plant cell slide. In groups, learners to prepare a temporary slide of a plant cell. In groups, learners to observe the structure of a plant cell prepared on a temporary slide.	Name the structures of a plant cell?	Active; Integrated science Learner's Book Grade 8 pg.83 Picture Video Charts	Oral questions Oral Report Observation Written exercise	

				temporary slide of a plant cell.					
		LIVING THINGS AND THEIR ENVIRONMENT	Preparation of temporary slides of plant cells.*(animal cell as observed under a light microscope)*	By the end of the lesson the learner should be able to; i. State the various parts of a light microscope. ii. Describe how to use the light microscope with a permanent slide of an animal cell. iii. Appreciate the use of a permanent slide.	Learners to observe a picture showing the parts of a microscope. In groups, learners to demonstrate how to use a microscope with a permanent slide of an animal cell. In pairs, learners to draw the structure of an animal cell as observed under a light microscope with a permanent slide.	Name the structures of a plant cell?	Active; Integrated science Learner's Book Grade 8 pg.84 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	4	LIVING THINGS AND THEIR ENVIRONMENT	Preparation of temporary slides of plant cells.*(observation of a temporary slide containing animal cell)*	By the end of the lesson the learner should be able to; i.State the various apparatus used to prepare a temporary slide. ii. Describe how to prepare a temporary slide of an animal cell. iii. Appreciate the need for preparing a temporary slide of a plant cell.	In groups, learners to label the apparatus used to prepare a temporary animal cell slide. In groups, learners to prepare a temporary slide of an animal cell. In groups, learners to observe the structure of an animal cell prepared on a temporary slide	Name the structures of a plant cell?	Active; Integrated science Learner's Book Grade 8 pg.85 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	5	LIVING THINGS AND THEIR ENVIRONMENT	Preparation of temporary slides of plant cells.*(revision)*	By the end of the lesson the learner should be able to; i. Answer written questions correctly. ii. Explain the questions correctly.	Revision	Revision	Revision	Revision	

				iii. Appreciate the need for doing an assessment.					
5		LIVING THINGS AND THEIR ENVIRONMENT	Magnification of cells seen under the light microscope*(definition of the term magnification)*	By the end of the lesson the learner should be able to; i.Define the term magnification. ii. Calculate the magnification of a specimen by a light microscope. iii. Enjoy calculating the magnification of a specimen by a light microscope.	In groups learners to prepare a chart defining the term magnification. Learners to observe a demonstration on how to calculate magnification of a specimen by light microscope. Learners to practice calculating magnification of a specimen by a light microscope.	Define the term magnification?	Active; Integrated science Learner's Book Grade 8 pg.86 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	2	LIVING THINGS AND THEIR ENVIRONMENT	Magnification of cells seen under the light microscope*(definition of the term resolution)*	By the end of the lesson the learner should be able to; i. Define the term resolution (resolving power of a microscope) ii. Describe the term resolving power. iii. Appreciate the need to use a light microscope.	Learners to define the term resolving power. In groups the learners discuss the meaning of the term resolving power.	Define the term magnification?	Active; Integrated science Learner's Book Grade 8 pg.87 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	3	LIVING THINGS AND THEIR ENVIRONMENT	Magnification of cells seen under the light microscope*(calculating the magnification of a plant cell)*	By the end of the lesson the learner should be able to; i. Define the term resolution (resolving power of a microscope) ii. Describe the term resolving power. iii. Appreciate the need to use a light microscope.	Learners to define the term magnification. Learners to observe a demonstration on how to calculate magnification of a specimen by light microscope. Learners to practice calculating magnification of a specimen by a light microscope.	Define the term magnification?	Active; Integrated science Learner's Book Grade 8 pg.88 Picture Video Charts	Oral questions Oral Report Observation Written exercise	

		LIVING THINGS AND THEIR ENVIRONMENT	Magnification of cells seen under the light microscope*(calculating the magnification of an animal cell)*	By the end of the lesson the learner should be able to; i. Define the term magnification. ii. Calculate the magnification of a cell under a light microscope. iii. Appreciate the need to use a light microscope.	Learners to define the term magnification. Learners to observe a demonstration on how to calculate magnification of a specimen by light microscope. Learners to practice calculating magnification of a specimen by a light microscope.	Define the term magnification?	Active; Integrated science Learner's Book Grade 8 pg.89 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	5	LIVING THINGS AND THEIR ENVIRONMENT	Magnification of cells seen under the light microscope*(calculating the magnification of an animal cell)*	By the end of the lesson the learner should be able to; i. Define the term magnification. ii. Calculate the magnification of a cell under a light microscope. iii. Appreciate the need to use a light microscope.	Learners to define the term magnification. Learners to observe a demonstration on how to calculate magnification of a specimen by light microscope. Learners to practice calculating magnification of a specimen by a light microscope.	Define the term magnification?	Active; Integrated science Learner's Book Grade 8 pg.90 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
6	**1**	LIVING THINGS AND THEIR ENVIRONMENT	Magnification of cells seen under the light microscope.	By the end of the lesson the learner should be able to; i. Define the term magnification. ii. Calculate the magnification of a cell under a light microscope. iii. Appreciate the need to use a light microscope.	Learners to define the term magnification. Learners to observe a demonstration on how to calculate magnification of a specimen by light microscope. Learners to practice calculating magnification of a specimen by a light microscope.	Define the term magnification?	Active; Integrated science Learner's Book Grade 8 pg.91 Picture Video Charts	Oral questions Oral Report Observation Written exercise	

		LIVING THINGS AND THEIR ENVIRONMENT	Magnification of cells seen under the light microscope	By the end of the lesson the learner should be able to; i. Define the term magnification. ii. Calculate the magnification of a cell under a light microscope. iii. Appreciate the need to use a light microscope.	Learners to define the term magnification. Learners to observe a demonstration on how to calculate magnification of a specimen by light microscope. Learners to practice calculating magnification of a specimen by a light microscope.	Define the term magnification?	Active; Integrated science Learner's Book Grade 8 pg.92 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	3	LIVING THINGS AND THEIR ENVIRONMENT	Magnification of cells seen under the light microscope	By the end of the lesson the learner should be able to; i. Define the term resolution (resolving power of a microscope) ii. Make a model of a cell. iii. Appreciate the need to use a light microscope.	Learners to define the term magnification. Learners to observe a demonstration on how to calculate magnification of a specimen by light microscope. Learners to practice calculating magnification of a specimen by a light microscope.	Define the term magnification?	Active; Integrated science Learner's Book Grade 8 pg.93 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	4	LIVING THINGS AND THEIR ENVIRONMENT	Magnification of cells seen under the light microscope(importance of a light microscope)	By the end of the lesson the learner should be able to; i. Define the term magnification. ii. Calculate the magnification of a cell. iii. Appreciate the need to use a light microscope.	Learners to define the term magnification. Learners to observe a demonstration on how to calculate magnification of a specimen by light microscope. Learners to practice calculating magnification of a specimen by a light microscope.	Define the term magnification?	Active; Integrated science Learner's Book Grade 8 pg.94 Picture Video Charts	Oral questions Oral Report Observation Written exercise	

		LIVING THINGS AND THEIR ENVIRONMENT	Magnification of cells seen under the light microscope (revision)	By the end of the lesson the learner should be able to; i. Define the term magnification. ii. Calculate the magnification of a cell. iii. Appreciate the need to use a light microscope.	Learners to define the term magnification. Learners to observe a demonstration on how to calculate magnification of a specimen by light microscope. Learners to practice calculating magnification of a specimen by a light microscope.	Define the term magnification?	Active; Integrated science Learner's Book Grade 8 pg.95 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
7	**MID-TERM ASSESSMENT AND BREAK.**								
8	**1**	LIVING THINGS AND THEIR ENVIRONMENT	Movement of materials in and out of the cell.(structure of the cell membrane)	By the end of the lesson the learner should be able to; i. State the parts of a cell membrane. ii. Describe the structure of a cell membrane. iii. Appreciate the need to have a cell membrane as part of a cell.	Learners to observe a picture showing the parts of a cell membrane. In groups learners to discuss the structure of a cell membrane. Learners to draw the structure of a cell membrane.	How do substances move in and out of the cell?	Active; Integrated science Learner's Book Grade 8 pg.96 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	2		Movement of materials in and out of the cell(parts of the cell membrane)	By the end of the lesson the learner should be able to; i. State the parts of a cell membrane. ii. Describe the structure of a cell membrane. iii. Appreciate the need to have a cell membrane as part of a cell.	Learners to watch a video showing the parts of a cell membrane. In groups, learners to draw a cell membrane.	How do substances move in and out of the cell?	Active; Integrated science Learner's Book Grade 8 pg.97 Picture Video Charts	Oral questions Oral Report Observation Written exercise	

		LIVING THINGS AND THEIR ENVIRONMENT	Movement of materials in and out of the cell(semi-permeability)	By the end of the lesson the learner should be able to; i. Define the term semi-permeability. ii. Describe semi-permeability as a property of cell membrane. iii. Appreciate the need for a cell membrane to be semi-permeable.	Learners to define the term semi-permeability of a cell. In groups learners to discuss how semi-permeability affects the movement of substances in and out of the cell. In groups, learners to demonstrate semi-permeability using a visking.	How do substances move in and out of the cell?	Active; Integrated science Learner's Book Grade 8 pg.98 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	4	LIVING THINGS AND THEIR ENVIRONMENT	Movement of materials in and out of the cell(possession of electric charges)	By the end of the lesson the learner should be able to; i. State the electric charges found on the cell membrane. ii. Describe the role of charges on the cell membrane. iii. Appreciate the need to have electric charges on the cell membrane.	Learners to state the electric charges found on the cell membrane. Learners to discuss the role of charges on a cell membrane. Learners to discuss how electric charges affects the movement of substances in and out of the cell.	How do substances move in and out of the cell?	Active; Integrated science Learner's Book Grade 8 pg.100 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	5	LIVING THINGS AND THEIR ENVIRONMENT	Movement of materials in and out of	By the end of the lesson the learner should be able to;	Learners to define the term PH.	How do substances move in	Active; Integrated science	Oral questions Oral Report	

			the cell(sensitivity to changes in PH)	i.State the effect of pH on the cell membrane. ii. Describe the effect of pH on a cell membrane. iii. Appreciate the effect on pH on a cell membrane.	Learners to discuss how the PH affects the movement of substances in and out of the cell. In groups learners to demonstrate using a model how PH affects the movement of substances in and out of the cell.	and out of the cell?	Learner's Book Grade 8 pg.100 Picture Video Charts	Observation Written exercise	
9		LIVING THINGS AND THEIR ENVIRONMENT	Movement of materials in and out of the cell(meaning of diffusion)	By the end of the lesson the learner should be able to; i.Define the term diffusion. ii. Demonstrate the process of diffusion. iii. Appreciate the role of diffusion in living things.	Learners to define the term diffusion. In groups, the learners to demonstrate diffusion using potassium manganate (VII). Learners to write an explanation on the changes observed when testing for diffusion using water and potassium manganate (VII)	How do substances move in and out of the cell?	Active; Integrated science Learner's Book Grade 8 pg.101 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	2	LIVING THINGS AND THEIR ENVIRONMENT	Movement of materials in and out of the cell(role of diffusion in living things)	By the end of the lesson the learner should be able to; i. State the role of diffusion in living things. ii. Describe the role of diffusion in living things. iii. Appreciate the role of diffusion in living things.	In groups, the learners to state the role of diffusion in living things. In groups the learners to discuss the role of diffusion in living things. Learners to present their findings.	How do substances move in and out of the cell?	Active; Integrated science Learner's Book Grade 8 pg.101 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	3	LIVING THINGS AND THEIR ENVIRONMENT	Movement of materials in and out of the cell(factors affecting diffusion)	By the end of the lesson the learner should be able to;	Learners to watch a video showing the factors affecting diffusion.	How do substances move in	Active; Integrated science	Oral questions Oral Report	

				i. State the factors that affect diffusion. ii. Explain the factors that affect diffusion. iii. Appreciate the role of diffusion in living things.	Learners to discuss various factors that affect diffusion. In groups, the learners present their findings on factors that affect diffusion.	and out of the cell?	Learner's Book Grade 8 pg.101 Picture Video Charts	Observation Written exercise	
		LIVING THINGS AND THEIR ENVIRONMENT	Movement of materials in and out of the cell(surface area to volume ratio as a factor affecting diffusion)	By the end of the lesson the learner should be able to; i. State how surface area to volume ratio as a factor affects diffusion. ii. Describe how surface area to volume ratio affect diffusion. iii. Appreciate need for movement of substances in and out of the cell.	Learners to define the term surface area to volume ratio. Learners to discuss how surface area to volume ratio affect diffusion. Learners to demonstrate using a model on how surface area to volume ratio affect diffusion.	How do substances move in and out of the cell?	Active; Integrated science Learner's Book Grade 8 pg.102 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	5	LIVING THINGS AND THEIR ENVIRONMENT	Movement of materials in and out of the cell (temperature as a factor affecting diffusion)	By the end of the lesson the learner should be able to; i.State how temperature as a factor affect diffusion. ii. Describe how temperature as a factor affect diffusion. iii. Appreciate the need for movement of substances in and out of the cell.	Learners to define the term temperature. Learners to discuss how temperature affect diffusion. Learners to demonstrate how temperature affect diffusion using a visking tubing.	How do substances move in and out of the cell?	Active; Integrated science Learner's Book Grade 8 pg.103 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
10	**1**	LIVING THINGS AND THEIR ENVIRONMENT	Movement of materials in and out of the cell(thickness of the membrane ratio as a factor affecting diffusion	By the end of the lesson the learner should be able to; i. State how thickness of a membrane affects the rate of diffusion.	Learners to state how thickness of a membrane affects the rate of diffusion.	How do substances move in and out of the cell?	Active; Integrated science Learner's Book Grade 8 pg.103	Oral questions Oral Report Observation Written exercise	

				ii. Describe how thickness of a membrane affect the rate of diffusion. iii. Appreciate the need for movement of substances in and out of the cell.	In groups, learners to discuss how thickness of a membrane affects the rate of diffusion. In groups, the learners to demonstrate how thickness of a membrane affects the rate of diffusion using a visking.		Picture Video Charts Visking tubing		
	2	LIVING THINGS AND THEIR ENVIRONMENT	Movement of materials in and out of the cell(concentration gradient ratio as a factor affecting diffusion)	By the end of the lesson the learner should be able to; i. State how concentration gradient affects the rate of movement of diffusion. ii. Describe how concentration gradient affects the rate of diffusion. iii. Appreciate the movement of substances in and out of the cell.	Learners to brainstorm on the meaning of the term concentration gradient. Learners to discuss how concentration gradient affect the rate of diffusion. Learners to demonstrate using a visking on how concentration gradient affect the rate of diffusion.	How do substances move in and out of the cell?	Active; Integrated science Learner's Book Grade 8 pg.104 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	3	LIVING THINGS AND THEIR ENVIRONMENT	Movement of materials in and out of the cell(physical states of particles as a factor affecting diffusion)	By the end of the lesson the learner should be able to; i.State how physical states of particles as a factor affect diffusion. ii. Describe how physical states of particles as a factor affect diffusion. iii. Appreciate the movement of substances in and out of the cell.	Learners to brainstorm on how the physical state of particles affects the rate of diffusion. Learners to watch a video on how physical state of particles affect the rate of diffusion. Learners to demonstrate using a visking tubing on how the physical state of particles affect the rate of diffusion.	How do substances move in and out of the cell?	Active; Integrated science Learner's Book Grade 8 pg.105 Picture Video Charts	Oral questions Oral Report Observation Written exercise	

	4	LIVING THINGS AND THEIR ENVIRONMENT	Movement of materials in and out of the cell(definition of the term osmosis)	By the end of the lesson the learner should be able to; i.Define the term osmosis. ii. Describe the how osmosis take place. iii. Appreciate the need for osmosis.	Learners to brainstorm on the meaning of the term osmosis. Learners to discuss on how the process of osmosis takes place.	How do substances move in and out of the cell?	Active; Integrated science Learner's Book Grade 8 pg.107 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	5	LIVING THINGS AND THEIR ENVIRONMENT	Movement of materials in and out of the cell(factors affecting osmosis)	By the end of the lesson the learner should be able to; i. State the factors affecting osmosis. ii. Describe the factors affecting osmosis. iii. Appreciate the movement of materials in and out of the cell.	Learners to use a digital device to research on the factors affecting osmosis. Learners to discuss the factors affecting osmosis.	How do substances move in and out of the cell?			
11	**1**	LIVING THINGS AND THEIR ENVIRONMENT	Movement of materials in and out of the cell(role of osmosis in living things)	By the end of the lesson the learner should be able to; i. State the role of osmosis in living things. ii. Describe the role of osmosis in living things. iii. Appreciate the role of osmosis in living things.	In pairs, learners to list the living and non-living things. Learners to watch a video showing the role of osmosis in living things. Learners to discuss the role of osmosis in living things.	How do substances move in and out of the cell?	Active; Integrated science Learner's Book Grade 8 pg.109 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	2	LIVING THINGS AND THEIR ENVIRONMENT	Movement of materials in and out of the cell (comparison between diffusion and osmosis)	By the end of the lesson the learner should be able to; i. State comparison between diffusion and osmosis. ii. Describe the relationship between diffusion and osmosis.	Learners to define the term osmosis and diffusion. Learners to discuss the relationship between osmosis and diffusion.	How do substances move in and out of the cell?	Active; Integrated science Learner's Book Grade 8 pg.110 Picture Video Charts	Oral questions Oral Report Observation Written exercise	

				iii. Appreciate the role of diffusion and osmosis.					
	3	LIVING THINGS AND THEIR ENVIRONMENT	Reproduction in human beings	By the end of the lesson the learner should be able to; i.Define the term reproduction. ii. Explain the process of reproduction of human being. iii. Appreciate the role of reproduction of human beings.	Learners to brainstorm on the meaning of the term reproduction. Learners to discuss the process of reproduction in human beings. Learners to draw the male and female reproductive system.	What is reproduction?	Active; Integrated science Learner's Book Grade 8 pg.111 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	4	LIVING THINGS AND THEIR ENVIRONMENT	Reproduction in human beings (The menstrual cycle in human beings)	By the end of the lesson the learner should be able to; i.Define the term menstrual cycle in human beings. ii. Describe the menstrual cycle in human beings. iii. Appreciate the need to maintain personal hygiene during menstruation.	Learners to research the on the meaning of the term menstrual cycle. Learners to watch a video on the menstrual cycle. In groups, learners to discuss the menstrual cycle.	What is reproduction?	Active; Integrated science Learner's Book Grade 8 pg.112 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	5	LIVING THINGS AND THEIR ENVIRONMENT	Reproduction in human beings(Challenges related to the menstrual cycle)	By the end of the lesson the learner should be able to; i.State the challenges related to the menstrual cycle. ii. Describe the challenges related to the menstrual cycle. iii. Appreciate the reproduction in human beings.	Learners to state the challenges related to menstrual cycle. In groups the learners to use the digital devices to research on the challenges related to the menstrual cycle.	What is reproduction?	Active; Integrated science Learner's Book Grade 8 pg.113 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
12	**1**	LIVING THINGS AND THEIR ENVIRONMENT	Reproduction in human beings(parts of the reproductive system)	By the end of the lesson the learner should be able to;	Learners to name the parts of the male and female reproductive system.	What is reproduction?	Active; Integrated science	Oral questions Oral Report	

				i. Name the parts of reproductive system. ii. Explain the functions of parts of the reproductive system. iii. Appreciate the reproduction in human beings.	In groups, learners to discuss the functions of the parts of the reproductive system.		Learner's Book Grade 8 pg.113 Picture Video Charts	Observation Written exercise	
	2	LIVING THINGS AND THEIR ENVIRONMENT	Reproduction in human beings(fusion of sperm with the egg)	By the end of the lesson the learner should be able to; i. Explain the fusion of sperm with the egg. ii. Describe the process of fusion of sperm with the egg. iii. Appreciate the need for reproduction in human beings.	Learners to define the term fusion. In groups learners to watch a video on the fusion process. Learners to discuss the fusion process.	What is reproduction?	Active; Integrated science Learner's Book Grade 8 pg.113 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	3	LIVING THINGS AND THEIR ENVIRONMENT	Reproduction in human beings(implantation)	By the end of the lesson the learner should be able to; i. Explain the process of implantation in human beings. ii. Describe the process of implantation in human beings. iii. Appreciate the need for reproduction in human beings.	Learners to define the term implantation. Learners to watch a video on the implantation process. Learners to draw a diagram showing the implantation.	What is reproduction?	Active; Integrated science Learner's Book Grade 8 pg.114 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	4	LIVING THINGS AND THEIR ENVIRONMENT	Reproduction in human beings(common STIs)	By the end of the lesson the learner should be able to; i. State the common STIs. ii. Describe the various STIs. iii. Appreciate the need to protect oneself from the STIs.	Learners to state the common STIs. In groups learners to watch a video showing the various STIs.	What is reproduction?	Active; Integrated science Learner's Book Grade 8 pg.116 Picture Video Charts	Oral questions Oral Report Observation Written exercise	

					In groups learners to discuss the common causes of STIs.				
	5	LIVING THINGS AND THEIR ENVIRONMENT	Reproduction in human beings(Causes and symptoms of HIV and AIDS)	By the end of the lesson the learner should be able to; i.State the symptoms and causes of HIV and AIDS. ii. Describe the causes of HIV and AIDS. iii. Appreciate the need to protect oneself from HIV and AIDS.	Learners to watch a video showing the causes and symptoms of HIV and AIDS. Learners to discuss the causes of HIV and AIDS.	What is reproduction?	Active; Integrated science Learner's Book Grade 8 pg.117 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
13	**1**	LIVING THINGS AND THEIR ENVIRONMENT	Reproduction in human beings(causes and symptoms of Gonorrhea)	By the end of the lesson the learner should be able to; i.State the causes and symptoms of gonorrhea. ii. Describe the causes and symptoms of Gonorrhea. iii. Appreciate the need to protect oneself from Gonorrhea.	Learners to watch a video showing the causes of gonorrhea. In groups learners to discuss the causes of Gonorrhea.	What is reproduction?	Active; Integrated science Learner's Book Grade 8 pg.118 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	2	LIVING THINGS AND THEIR ENVIRONMENT	Reproduction in human beings(causes and symptoms of syphilis)	By the end of the lesson the learner should be able to; i.State the causes and symptoms of syphilis. ii. Describe the causes and symptoms of syphilis. iii. Appreciate the need to protect oneself from syphilis.	Learners to watch a video showing the causes and symptoms of syphilis. Learners to discuss the causes and symptoms of syphilis.	What is reproduction?	Active; Integrated science Learner's Book Grade 8 pg.119 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	3	LIVING THINGS AND THEIR ENVIRONMENT	Reproduction in human beings(causes and symptoms of Herpes)	By the end of the lesson the learner should be able to; i. State the causes and symptoms of herpes. ii. Describe the causes and symptoms of herpes.	Learners to watch a video showing the causes and symptoms of herpes.	What is reproduction?	Active; Integrated science Learner's Book Grade 8 pg.120 Picture	Oral questions Oral Report Observation Written exercise	

				iii. Appreciate the need to protect oneself form herpes.	Learners to discuss the causes and symptoms of herpes.		Video Charts		
	4	LIVING THINGS AND THEIR ENVIRONMENT	Reproduction in human beings(revision)	By the end of the lesson the learner should be able to; i. State the general causes of STIs. ii. Describe the general causes and symptoms of STIs iii. Appreciate the need to protect oneself from the general causes of STIs.	REVISION	What is reproduction?	Active; Integrated science Learner's Book Grade 8 pg.121 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
	5	LIVING THINGS AND THEIR ENVIRONMENT	Reproduction in human beings(revision)	By the end of the lesson the learner should be able to; i. State the general causes of STIs. ii. Describe the general causes and symptoms of STIs iii. Appreciate the need to protect oneself from the general causes of STIs..	REVISION.	What is reproduction?	Active; Integrated science Learner's Book Grade 8 pg.122 Picture Video Charts	Oral questions Oral Report Observation Written exercise	
14	**END OF TERM ASSESMENT**								