SCIENCE AND TECHNOLOGY SCHEME OF WORK GRADE 5 TERM ONE

Wk	Lsn	Strand/ Theme	Sub strand	Specific learning outcomes	Key inquiry Questions	Learning experiences	Learning Resources	Assessment methods	Refl
1	1	**LIVING THINGS**	**Plants:** Difference between flowering and Non-flowering plants	By the end of the sub strand the learner should be able to: a. Differentiate betweenflowering and non- flowering plants b. Identify flowering and non-flowering plants in the environment c. develop interest in classifying plants	1. What is the main difference between flowering plants and non-flowering plants?	Learners are guided to: Collect green plants in their locality. Learners are guided to Take excursion to identify and classify flowering and non-flowering plants in their locality Learners are guided to digital devices such as camera phones and tablets totake photos of flowering andnon-flowering plants in their locality	Convectional laboratory resources and improvised resources from the environment	a) question andanswer method, b) class quizzes c) individual performance assessment and d) project work	
	2		**Plants:** classification of plants	By the end of the sub strand the learner should be able to: a. Identify the two classification of plants b. classify plants into flowering and nonflowering c. develop interest inclassifying plants	1. What is the main difference between flowering plants and non-flowering plants?	Learners are guided to Collect green plants in their locality. Learners are guided to excursion to identify and classify flowering and non- flowering plants in their locality Learners are guided to use digital devices such as camera phones and tablets totake photos of flowering andnon-flowering plants in their locality	Convectional laboratory resources and improvised resources from the environment	a) question andanswer method, b) class quizzes c) individual performance assessment and d) project work	
	3		**Plants:** classification of plants	By the end of the sub strand the learner should be able to: a. identify the two classification of plants b. Classify plants into flowering and non-flowering plants c. develop interest in classifying plants	What is the main difference between flowering plants and non-flowering plants	Learners are guided to: Collect green plants in their locality. Learners are guided to: excursion to identify and classify flowering and non- flowering plants in their locality Learners are guided to use digital devices such as	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	

						camera phones and tablets to take photos of flowering and non-flowering plants in their locality			
	4		**Plants:** safety when handling harmful plants	By the end of the sub strand the learner should be able to: a. classify plants into flowering and non-flowering plants b. Demonstrate precautions taken when handling harmful plants in the environment. c. develop interest in classifying plants	1. What is the main difference between flowering plants and non-flowering plants?	Learners are guided to: digital devices such as camera phones and tablets totake photos of flowering andnon-flowering plants in theirlocality Learners are guided to: Discuss theprecautions taken when handling harmful plants.	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
2	**1**		**Plants:** safety when handling harmful plants	By the end of the sub strand the learner should be able to: a. classify plants into flowering and non-flowering plants b. Demonstrate precautions taken when handling harmful plants in the environment. c. develop interest in classifying plants	1. What is the main difference between flowering plants and non-flowering plants?	Learners are guided to: digital devices such as camera phones and tablets totake photos of flowering andnon-flowering plants in theirlocality Learners are guided to: Discuss theprecautions taken when handling harmful plants.	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
	2		**Plants:** Importance of flowering plants	By the end of the sub strand the learner should be able to: a. Specify the importance of flowering plants. b. Draw and colour flowering plants c. develop interest in classifying plants	1. What is the main difference between flowering plants and non-flowering plants?	Learners are guided to: CollectGrom plants in their locality. Learners are guided to: excursion to identify and classify flowering and non- flowering plants in their locality Learners are guided to: digital devices such as camera phones and tablets totake photos of flowering andnon-flowering plants in theirlocality Learners are guided to: Discuss t h e Importance of flowering plant.	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work e) questions and answer methods	

	3		**Plants:** Importance of flowering plants	By the end of the sub strand the learner should be able to: a. Specify the importance of flowering plants. b. Draw and colour flowering plants c. develop interest in classifying plants	1, What is the maindifference between Flowering plants and non-flowering plants?	Learners are guided to: Collect greenplants in their locality. Learners are guided to: excursion to identify and classify flowering and non- flowering plants in their locality Learners are guided to: digital devices such as camera phones and tablets totake photos of flowering andnon-flowering plants in their locality Learners are guided to: Discuss the importance of floweringplant.	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
	4		**Plants:** classification of plants	By the end of the sub strand the learner should be able to: a. Use digital devices to observe flowering and non-flowering plants b. Draw and colour flowering plants c. develop interest in classifying plants	1. What is the main difference between flowering plants and non-flowering plants?	Learners are guided to: Collect green plants in their locality. Learners are guided to: excursion to identify and classify flowering and non- flowering plants in their locality Learners are guided to: digital devices such as camera phones and tablets totake photos of flowering andnon-flowering plants in their locality	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
3	**1**		**Fungi :** Define theterm fungi	By the end of the sub strand, the learner should be able to: a. Define the term fungi b. Identify fungi in their locality c. Develop curiosity in explaining the meaning of fungi	1. What is the economic importanceof fungi?	Learners are guided to: Collectfungi such as bread moulds, puffballs, yeast and mushroom. Learners are guided to: Searchfor more examples of fungi using digital devices. ***Hint*** ***-Avoid handling toadstools- Scientific names and processof making food not required***	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, class quizzes individual performance assessment and project work	
	2		**Fungi :** Identifying fungi	By the end of the sub strand,the learner should be able to: a. identify fungi in theirlocality b. state the importance offungi to human beings c. appreciate the economic importance of fungi in the environment	1. What is the economic importanceof fungi?	Learners are guided to: discuss the economic importance of moulds(yeast andmushroom) ***Hint*** ***-Avoid handling toadstools*** ***- Scientific names and processof making food not required***	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, class quizzes individual performance assessment and project work	

	3		**Fungi :** Identifying fungi	By the end of the sub strand, the learner should be able to: a. identify fungi in their locality b. state the importance of fungi to human beings c. appreciate the economic importance of fungi in the environment	1. What is the economic importance of fungi?	Learners are guided to: discuss the economic importance of moulds(yeast and mushroom) ***Hint*** ***-Avoid handling toadstools*** ***- Scientific names and process of making food not required***	Convectional laboratory resources and improvised resources from the environment	a) question andanswer method, b) class quizzes c) individual performance assessment and d) project work	
	4		**Fungi :** Safety when handling fungi	By the end of the sub strand, the learner should be able to: a. State the precautions to take when handling fungi. b. Observe safety when handling fungi c. appreciate the economic importance of fungi in the environment	1. What is the economic importance of fungi?	Learners are guided to: Discuss precaution to take when handling fungi such as bread moulds ***Hint*** ***-Avoid handling toadstools*** ***- Scientific names and process of making food not required***	Convectional laboratory resources and improvised resources from the environment	a) question andanswer method, b) class quizzes c) individual performance assessment and d) project work	
4	**1**		**Fungi :** Safety when handling fungi	By the end of the sub strand, the learner should be able to: a. State the precautions to take when handling fungi. b. Observe safety when handling fungi c. appreciate the economic importance of fungi in the environment	1. What is the economic importance of fungi?	Learners are guided to: Discuss precaution to take when handling fungi such as bread moulds ***Hint*** ***-Avoid handling toadstools*** ***- Scientific names and process of making food not required***	Convectional laboratory resources And improvised resources from Environment	a) question and answer metho d, b) class quizzes c) individual performance assessment and d) project work	
	2		**Fungi**	By the end of the sub strand, the learner should be able to: a. Observe fungi using digital devices b. Mention some fungi that we should avoid handling c. appreciate the economic importance of fungi in the environment	1. What is the Economic importanceof fungi?	Learners are guided to: Search for more examples of fungiusing digital devices. Discuss precaution to take when handling fungi such as bread moulds Learners are guided to: Discuss the economic importance of moulds(yeast and mushroom) ***Hint*** ***-Avoid handling toadstools*** ***- Scientific names and process of making food not required***	Convectional laboratory resources and Improvised resources From the environment	a) question and answer metho d, b) class quizzes c) individual performance assessment and d) project work	
	3		**Animals:**	By the end of the sub strand the learner should be able to:	1. What differentiates Mammals from birds?	The school and neighborhood	Convectional lab. resources	a) question and answer	

			Vertebrates : Meaning of vertebrates	a. Explain what a vertebrate inthe group of animals is. b. Identify vertebrates in the immediate environment c. develop interest in characteristics of vertebrates in their locality	2. What are the differences between mammals and reptiles?	to observe and identify different vertebrates	improvised resources from the environment	method, b) class quizzes c) individual performance assessment and d) project work	
	4		**Animals: Vertebrates (10)**	By the end of the sub strand the learner should be able to: a. group vertebrates into mammals, birds, reptilesfish and amphibians b. identify the animals in the various groups of vertebrates c. develop interest in characteristics of vertebrates in their locality	1. What differentiates mammals from birds? 2. What are the differences between mammals and reptiles?	In group learners to exporer the school and neighborhood to observe and identify different vertebrates	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
5	**1**		**Animals: Vertebrates** Mammals	By the end of the sub strand the learner should be able to: a. group vertebrates into mammals, birds, reptilesfish and amphibians b. Identify major characteristics of each group of vertebrates. c. develop interest in characteristics of vertebrates in their locality	1. What differentiates mammals from birds? 2. What are the differences between mammals and reptiles?	Learners are guided to: major characteristics of mammals.	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
	2		**Animals: Vertebrates** Birds	By the end of the sub strand the learner should be able to: a. group vertebrates into mammals, birds, reptilesfish and amphibians b. Identify major characteristics of each group of vertebrates. c. develop interest in characteristics of vertebrates in their locality	1. What differentiates mammals from birds? 2. What are the differences between mammals and reptiles?	In groups learners to: Discuss major characteristics of birds	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
	3		**Animals: Vertebrates** Fish	By the end of the sub strand the learner should be able to:	1. What differentiates mammals from birds? 2. What are the differences between	Major characteristics of fish. Use digital devices to learn More about vertebrates.	Convectional laboratory resources and improvised	a) question and answer method, b) class quizzes	

				a. group vertebrates into mammals, birds, reptiles fish and amphibians b. Identify major characteristics of each group of vertebrates. c. develop interest in characteristics of vertebrates in their locality	mammals and reptiles?		resources from the environment	c) individual performance assessment and d) project work	
	4		**Animals: Vertebrates** Reptiles	By the end of the sub strand the learner should be able to: a. group vertebrates into mammals, birds, reptiles fish and amphibians b. Identify major characteristics of each group of vertebrates. c. develop interest in characteristics of vertebrates in their locality	1. What differentiates mammals from birds? 2. What are the differences between mammals and reptiles?	In groups learners to: Discuss major characteristics of reptiles	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
6	**1**		**Animals: Vertebrates** Amphibians	By the end of the sub strand the learner should be able to: a. group vertebrates into mammals, birds, reptiles fish and amphibians b. Identify major characteristics of each group of vertebrates. c. develop interest in characteristics of vertebrates in their locality	1. What differentiates mammals from birds? 2. What are the differences between mammals and reptiles?	In groups learners to: Discuss major characteristics of amphibians	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
	2		**Animals:** **Vertebrates** Safety when handling animals	By the end of the sub strand the learner should be able to: a. Identify major characteristics of each group of vertebrates. b. State the precautions necessary when handling animals in the locality c. develop interest in characteristics of vertebrates in their locality	1. What differentiates mammals from birds? 2. What are the differences between mammals and reptiles?	Learners are guided on safety precaution when handling different animals in their locality	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
	3		**Animals: Vertebrates**	By the end of the sub strand the learner should be able to:	1. What differentiates mammals from birds?	precaution when handling		a) question and answer	

			Making a portfolio	a. Make a portfolio on the different classes of vertebrates b. Observe safety when handling materials c. develop interest in characteristics of vertebrates in their locality	2. What are the differences between mammals and reptiles?	different animals in their locality ***Project 1:making a photo album of categories of different animals different animals in the locality***	Convectional laboratory resources and improvised resources from the environment	method, b) class quizzes c) individual performance assessment and d) project work	
	4		**Animals: Vertebrates** Making a portfolio	By the end of the sub strand the learner should be able to: a. Make a portfolio on the different classes of vertebrates b. Observe safety when handling materials c. develop interest in characteristics of vertebrates in their locality	1. What differentiates mammals from birds? 2. What are the differences between mammals and reptiles?	Use digital devices to access, observe and identify different vertebrates ***Project 1:making a photo album of categories of different animals different animals in the locality***	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
7	**1**		**Human Body:** sense organs	By the end of the sub strand the learner should be able to: a. Identify the various sense organs in a human being. b. Draw and colour the various sense organs c. Appreciate the importance of sense organs	1. What role do sense organs play in human beings? 2. Why is it important to care for the body sense organs?	In group's learners are guided to identify sense organs in their bodies (Nose, ears, eyes, skin and tongue). **NB: Details of internal structure not required.**	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
	2		**Human Body:** functions of sense organs	By the end of the sub strand the learner should be able to: a. State the functions of the various sense organs b. Watch a video clip on the functions of sense organs c. Appreciate the importance of sense organs	1. What role do sense organs play in human beings? 2. Why is it important to care for the body sense organs?	**NB: Details of internal structure not required.** Learners are guided to watch a video to showing functions of sense organs. .	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
	3		**Human Body:** functions of sense organs	By the end of the sub strand the learner should be able to: a. Identify and fill crosswords on sense organs b. Explain functions of sense organs in a human being. c. Demonstrate the care of the various sense organs.	1. What role do sense organs play in human beings? 2. Why is it important to care for the body sense organs?	**NB: Details of internal structure not required.** Learners are guided to fill crosswords onsense organs.	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	

	4		**Human Body:** Observing sense organs using a hand lenses	By the end of the sub strand the learner should be able to: a. Observe the sense organs using a hands lens and record their observation b. Explain functions of sense organs in a human being. c. Appreciate the importance of sense organs	1. What role do sense organs play in human beings? 2. Why is it important to care for the body sense organs?	**NB: Details of internal structure not required.** Learners in groups observe the skin, nose and ears using the hand lens. Learners record their findings and explain observations.	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
8	**1**		**Human Body:** Care for sense organs	By the end of the sub strand the learner should be able to: a. Identify the various sense organs in a human being. b. State ways of caring for the various sense organs c. Demonstrate the care of the various sense organs.	1. What role do sense organs play in human beings? 2. Why is it important to care for the body sense organs?	**NB: Details of internal structure not required**. Learners in groups guided to discuss how to care for their sensory organs.	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
	2		**Human Body:** Care for sense organs	By the end of the sub strand the learner should be able to: a. Identify the various sense organs in a human being. b. State ways of caring for the various sense organs c. Demonstrate the care of the various sense organs.	1. What role do sense organs play in human beings? 2. Why is it important to care for the body sense organs?	**NB: Details of internal structure not required.** Learners in groups guidedto discuss how to care for their sensory organs.	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
	3		**Skeleton and Muscles** Observing parts of a human skeleton	By the end of the sub strand the learner should be able to: a. Watch a video clip and observe the parts of a human skeleton b. Draw and colour the human skeleton c. Appreciate the importance of the human skeleton	1. What is the main function of the human skeleton?	Leaners are guided to watcha video to observe the parts of human skeleton (Skull, backbone, ribcage, limb bones). **NB: Detailed structure not required**	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
	4		**Skeleton and Muscles** Parts of a human skeleton	By the end of the sub strand the learner should be able to: a. State the parts of human skeleton. b. Model a human skeleton c. Appreciate the importance of the human skeleton	1. What is the main function of the human skeleton?	**NB: Detailed structure not required** Learners are guided to discuss parts of a human skeleton	Convectional laboratory resources and Improvised resources From the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	

9	**1**		**Skeleton and Muscles** Parts of a human skeleton	By the end of the sub strand the learner should be able to: a. State the parts of human skeleton. b. Model a human skeleton c. Appreciate the importanceof the human skeleton	1. What is the main function of the human skeleton?	**NB: Detailed structure not required** Leaners are guided to discuss parts of a human skeleton	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
	2		**Skeleton and Muscles** Types of muscles	By the end of the sub strand the learner should be able to: a. State the different types of muscles b. Watch a video clip on the different types of muscles c. Appreciate the importanceof muscles	1. What is the main function of the human skeleton?	**NB: Detailed structure not required** Learners are guided to discuss state the different typesof muscles	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
	3		**Skeleton and Muscles** Functions of skeletal muscles	By the end of the sub strand the learner should be able to: a. State the functions of skeletal muscle in a humanbeing. b. Watch a video clip on the functions of skeletal muscles c. Develop curiosity in explaining the importanceof skeletal muscles in human beings	1. What is the main function of the human skeleton?	Learners are guided to watcha video to observe the parts of human skeleton (Skull, backbone, ribcage, limb bones). **NB: Detailed structure not required** Learners in groups discuss cussthe functions of skeletal muscles.	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
	4		**Skeleton and Muscles** Functions of skeletal muscles	By the end of the sub strand the learner should be able to: a. State the functions of skeletal muscle in a humanbeing. b. Watch a video clip on the functions of skeletal muscles c. Develop curiosity in explaining the importanceof skeletal muscles in human beings	1. What is the main function of the human skeleton?	Learners are guided to watcha video to observe the parts of human skeleton (Skull, backbone, ribcage, limb bones). **NB: Detailed structure not required** Learners discuss the functions of skeletal muscles.	Convectional laboratory resources and improvised resources from the environment	a) question and answer method, b) class quizzes c) individual performance assessment and d) project work	
10	**ASSESMENT**								